昆 蟲 学 評 論

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A New Species of the Genus *Asaperda* (Coleoptera, Cerambycidae, Lamiinae) from Japan

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Abstract A new species of the cerambycid genus *Asaperda* is described from Japan under the name *A. silvicultrix* as an allied species to *A. rufipes* BATES and *A. tenuicornis* KOMIYA.

Recently, the authors had an opportunity to examine many specimens of the genus *Asaperda* from Japan, in which they recognized some from the western part of Japan as having just intermediate characteristics of *A. rufipes* BATES, 1873, and *A. tenuicornis* KOMIYA, 1984. Studying these specimens led to a conclusion that they were components of the population to be treated as an independent species.

On the other hand, KOMIYA (1984), in his revision of Japanese species of the genus *Asaperda*, included apparently the same as the present species to *A. rufipes* although he suggested a possibility of its independence. The present new species is remarkably allied to *A. rufipes* and *A. tenuicornis*, but is distinguishable in several respects.

Asaperda silvicultrix TOYOSHIMA et IWATA, sp. nov.

[Japanese name : Futo-kikusui-modoki-kamikiri]

(Figs. 1, 2 & 7)

Asaperda rufipes rufipes : KOMIYA, 1984, In : The Longicorn-beetles of Japan in Color, 372, pl. 53, figs. 385c & d, (part.).

Male : Body cylindrical elongate and somewhat robust. Head, prothorax, elytra and underside of body black ; antennae almost blackish-brown except for the black 1st segment ; maxillary palpi dark brown ;

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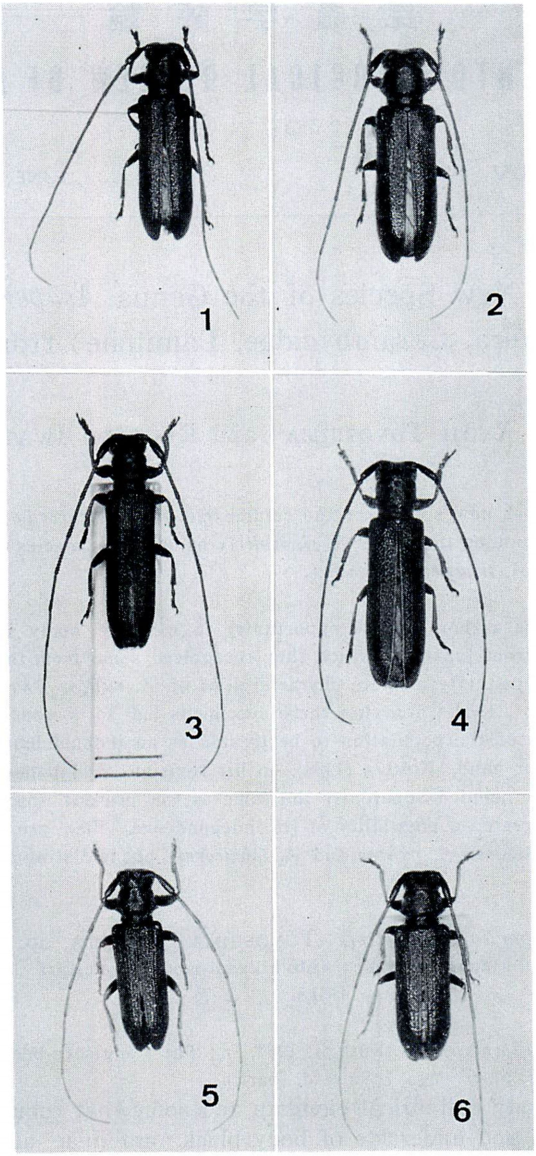


Figs. 1-6. 1. *Asaperda silvicultrix* sp. nov., holotype, ♂; 2. ditto, paratype, ♀; 3. *A. rufipes rufipes* Bates, ♂; 4. ditto, ♀; 5. *A. tenuicornis* Komiya, paratype, ♂; 6. ditto, paratype, ♀.

legs blackish-brown to black, never rufous nor reddish-brown.

Head bearing a fine median longitudinal furrow from frons to occiput; frons wider than long; vertex strongly concave between antennal insertions; surface coarsely and closely punctured, rather sparsely covered with recumbent yellowish-white pubescence though frons closely covered with long, semirecumbent and fine hairs.

Eyes divided; inferior lobes slightly deeper than genae below them.

Antennae comparatively thick, about 1.40–1.50 times as long as body length, closely covered with short, recumbent and yellowish-white pubescence and also furnished with long and suberect hairs on undersides of basal eight segments; relative lengths of segments being 0.80 : 0.17 : 1.00 : 0.99 : 0.96 : 0.91 : 0.85 : 0.75 : 0.72 : 0.68 : 0.75.

Prothorax with broad-based lateral tubercules obtusely projected, broadest behind the middle, constricted near base; anterior width equaling to length, a little broader than the posterior; the greatest distance across the tubercules slightly shorter than humeral width; relative width of the anterior border, the distance across the tubercules and the posterior border being 1.00 : 1.39 : 0.94; disc somewhat convex, closely punctate though rather sparsely so near the base, covered with short, recumbent and yellowish-white pubescence and also rather sparsely furnished with long erect or suberect fine hairs on antero-lateral area.

Scutellum subtrapezoidal, finely and closely punctulate, rather sparsely covered with yellowish-white pubescence.

Elytra about 2.75–2.80 times as long as basal width; sides subparallel from humeri to apical two-ninths, then strongly and roundly narrowed posteriad with narrowly rotundate apices; disc moderately convex though slightly depressed, narrowly and shallowly impressed just insides of the humeral angles, covered with short yellowish-white pubescence and coarsely punctate, the punctures sparser than those of pronotum and becoming a little finer apicad.

Legs finely and closely punctulate, covered with yellowish-white pubescence. Coxae and trochanters bearing long pubescence. Femora somewhat clavate. Tibiae weakly expanded near apices. Outer sides of fore tibiae furnished with long, erect and dark hairs; apical halves of mid and hind tibiae with brown setal-hairs; outsides of mid tibiae emarginate at about apical one-third.

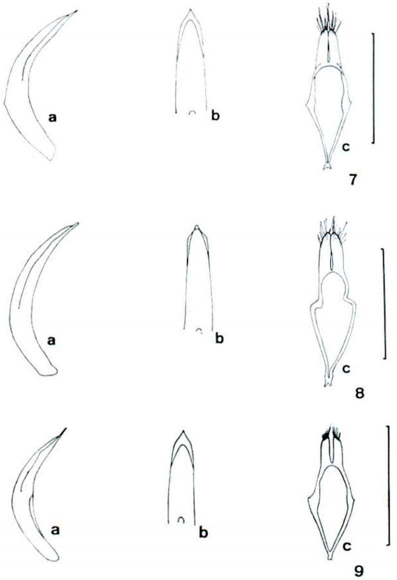
Underside of body covered with recumbent or suberect and yellowish-white pubescence; prosternum deeply and rather sparsely punctate, meso- and metasternum somewhat rugulose; the 1st to 4th abdominal visible sternites feebly and transversely rugulose and scattered with deep and large punctures, the 5th sternite furnished with large and sparse punctures in addition to the primary, fine, shallow and sparse punctures, and weakly emarginate on apical margin.

Genital organs medium-sized; apical portion of median lobe strongly tapered with acutely projected tip in dorsal view (Fig. 7b).

Female: Same coloration as in male. Body usually robuster than male. Antennae thicker, about 1.30–1.40 times as long as body length, relative lengths of segments being 0.77 : 0.16 : 1.00 : 1.03 : 0.98 : 0.94 : 0.89 : 0.80 : 0.78 : 0.70 : 0.80. Prothoracic lateral tubercules more obtusely projected. Scutellum broad-subtriangular. Elytra about 2.60–2.90 times as long as basal width. The 5th abdominal visible sternite weakly impressed near apex with rounded apical margin.

Measurements: Body length: ♂, 6.3–7.7 mm; ♀, 5.8–8.7 mm; width: ♂, 1.6–1.9 mm; ♀, 1.5–2.5 mm.

Type series: Holotype: ♂, Ômi-one, Hanase, Sakyô-ku, Kyôto City, Kyôto Pref., Japan, 17. V. 1985, I. TANAKA leg. (in coll. R. TOYOSHIMA) (Fig. 1). Paratypes: 1♀, same locality as the holotype, 29. V. 1985, I. TANAKA leg.; 1♀, Ashû Kyoto Univ. Forest, Miyama-chô, Kitakuwada-gun, Kyôto Pref., 6. VII. 1982, T. SUKENAGA leg. (in coll. R. IWATA); 1♀, ditto, 26. V. 1974, S. TSUYUKI leg. (the specimen identified



Figs. 7–9. 7. *A. silvicultrix* sp. nov., ♂, genital organ; 8. *A. rufipes rufipes* BATES, ♂, genital organ; 9. *A. tenuicornis* KOMIYA, ♂, genital organ.
(a, median lobe in lateral view; b, apex of median lobe in dorsal view; c, lateral lobes in dorsal view; scales: 1 mm).

by KOMIYA (1984) as *A. rufipes*); 1♀, Sasari-tôge, Sakyô-ku, Kyôto City, Kyôto Pref., 21. VI. 1984, K. HOSOKAWA leg. (Fig. 2); 1♀, ditto, 28. VI. 1984, Y. JOHKI leg. (in coll. R. IWATA); 1♀, ditto, 1. VII. 1984, K. KITAYAMA leg. (in coll. R. TOYOSHIMA); 1♂, ditto, 7. VII. 1984, K. KITAYAMA leg.; 1♀, Mt. Daihi, Sakyô-ku, Kyôto City, Kyôto Pref., 22. V. 1985, M. ÔGAKI leg.; 1♂, Katsuo-ji, Minoo City, Ôsaka Pref., 23. V. 1980, M. ÔGAKI leg.; 2♂♂, Mt. Daisen, Saihaku-gun, Tottori Pref., 17. VI. 1947, N. HIRATA leg.; 1♀, ditto, 7. VI. 1933, K. TAKEUCHI leg. (in coll. Univ. Osaka Pref., Ent. Lab.). They are preserved by the collectors themselves unless otherwise written.

The present new species is closely allied to *A. rufipes* BATES (Figs. 3, 4 & 8), but is distinguishable by the following respects: 1) the coloration is more blackish, especially in the legs which are blackish-brown to black; 2) the pubescence on the body is more whitish; 3) the body is shorter and stouter; 4) the antennae are shorter and thicker; 5) the apex of the median lobe of male genitalia is acutely projected, while that of *A. rufipes* is narrowly but apparently rounded in dorsal view (Fig. 8b).

The present new species also remarkably resembles *A. tenuicornis* KOMIYA (Figs. 5, 6 & 9), but can be distinguished by the following points: 1) the coloration is more blackish and the legs are not rufous nor reddish brown; 2) the body is usually larger; 3) the antennae are thicker, though the length ratio to the body is smaller; 4) the elytral impressions just insides of the humeral angles are clearer and stronger; 5) the male genital organs are apparently larger, though the shape of the apex of median lobe resembles that of *A. tenuicornis* (Fig. 9).

Notes: The present new species is distributed in the western part of Honshû, while *A. tenuicornis* KOMIYA in Shikoku and Kinki Districts. These two species are allopatric to each other, while *A. rufipes* BATES is sympatric to them.

Acknowledgements: The present authors wish to express their sincere gratitudes to Prof. M. SATÔ (Nagoya Women's University) and Mr. M. TÔYAMA (Nishinomiya City) for their critical readings of the manuscript. The senior author is indebted to Mr. J. KOMIYA for his kind advice and the loan of the paratype specimens of *A. tenuicornis*. Their hearty thanks are also due to Mr. S. FURIHATA, Dr. M. HIRANO, Mr. N. HIRATA, Mr. K. HOSOKAWA, Mr. H. IRIE, Mr. M. ISHII, Dr. M. ISHII, Mr. Y. ISHIKAWA, Dr. Y. JOHKI, Mr. A. KATÔ, Mr. S. KATÔ, Dr. Y. KATÔ, Mr. M. KATSUMATA, Messrs. A. & K. KITAYAMA, Dr. M. KURATA, Mr. K. MIZUNO, Mr. H. MOCHIZUKI, Mr. Y. NAMEDA, Mr. H. NARA, Mr. S. NISHINO, Mr. M. ÔGAKI, Mr. N. ÔTSUKA, Mr. K. SAKAI, Dr. H. SASAJI, Mr. T. SHIMOMURA, Mr. K. SUGINO, Mr. T. SUKENAGA, Mr. I. TANAKA, Mr. S. TSUYUKI, Mr. Y. WADA, Mr. A. WATANABE, Mr. A. YAMASHITA, Dr. F. YOSHIKAWA and Mr. N. YUZAWA for their kind supports in materials of *Asaperda* spp. used in this study. Further, they thank Mr. H. ARIMOTO for his useful advice and taking photographs for this study.

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Notes on Chrysomelid Beetles of S. India Preserved in the Collection of the Staatliches Museum of Munich (Coleoptera : Chrysomelidae)

By Haruo Takizawa[1] & Shinsaku Kimoto[2]

Based on a small collection of South Indian leaf-beetles preserved in the Staatliches Museum of Munich, 29 species including one new species, *Monolepta nathani* n. sp. are enumerated for subfamilies Eumolpinae, Galerucinae, Alticinae and Cassidinae.

We wish to express our hearty thanks to Dr. G. Scherer of Zoolologische Staatssammlung for his kindness in giving us chance to examine these specimens, and to Dr. L. Borowiec of Katedra Zoologii AR in Warclaw for identifying cassidid specimens.

Enumeration

Subfamily **Eumolpinae**

1. *Colasposoma auripenne* Motschulsky, 1860
15 exs., Coimbatore, 1,400 ft, Madras, XI. 1968, P. S. Nathan (PN) leg.

2. *Colasposoma coromandeliana* Jacoby, 1908
15 exs., Coimbatore, 1,400 ft, Madras, XI. 1968, PN.

3. *Colasposoma robustum* Jacoby, 1881
38 exs., Cinchona, 3,500 ft, Anaimalai Hills, Madras, VI. 1968, PN ; 1 ex., Coimbatore, 1,400 ft, Madras, X. 1968, PN.

4. *Pachnephorus porosus* Baly, 1878
1 ex., Coimbatore, 1,400 ft, Madras, X. 1968, PN.

5. *Basilepta* sp. 1, nr. *bipunctatum* Jacoby, 1887
1 ex., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.

6. *Basilepta* sp. 2, nr. *oblongopunctatum* Jacoby, 1908
1 ex., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.

Subfamily **Galerucinae**

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7. *Aulacophora indica* (GMÉLIN, 1790)
11 exs., Karikal, Pondicherry State, V. 1968, PN.
8. *Aulacophora nilgiriensis* JACOBY, 1903
18 exs., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
9. *Aulacophora semifusca* JACOBY, 1892
1 ex., Karikal, Pondicherry State, V. 1968, PN.
Distribution. Burma, India (new to India).
10. *Erganoides* sp., nr. *flavicollis* JACOBY, 1903
1 ex., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
11. *Dercetina nathani* TAKIZAWA, 1985
1 ex., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
12. *Hoplasoma indica* TAKIZAWA, 1987
1 ex., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
13. *Hoplasoma nilgiriensis* JACOBY, 1904
15 exs., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
14. *Hoplosaenidea* sp.
1 ex., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
15. *Hymenesia tranquebarica* (FABRICIUS, 1798)
1 ex., Karikal, Pondicherry State, X. 1968, PN.
16. *Madurasia obscurella* JACOBY, 1896
1 ex., Coimbatore, 1,400 ft, Madras, IV. 1968, PN.
17. *Monolepta limbata* (OLIVIER, 1808)
2 exs., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
18. *Monolepta nathani* n. sp.
Distribution. S. India.
19. *Monolepta nilgiriensis* JACOBY, 1904
1 ex., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
20. *Monolepta signata* (OLIVIER, 1808)
2 exs., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.
21. *Oides affinis* JACOBY, 1883
1 ex., Coimbatore, 1,400 ft, Madras, VI. 1968, PN.
22. *Palpoxena latifrons* (JACOBY, 1904)
3 exs., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.

Subfamily **Alticinae**

23. *Phygasia silacea* (ILLIGER, 1807)
1 ex., Karikal, Pondicherry State, XI. 1968, PN.

Subfamily **Cassidinae**

24. *Cassida delesserti* BOHEMAN, 1854
= *Cassida aspectabilis*: TAKIZAWA, 1985, Kontyû, 53 : 571.
1 ex., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN.

25. *Cassida syrtica* Boheman, 1856
1 ex., Karikal, Pondicherry State, V. 1968, PN.

26. *Chiridopsis bipunctata* (Linné, 1767)
16 exs., Coimbatore, 1,400 ft, Madras, XII. 1968, PN; 1 ex., Karikal, Pondicherry State, X. 1968, PN.

27. *Chiridopsis sexplagiata* (Spaeth, 1919) (Fig. a)
3 exs., Cinchona, 3,500 ft, Anaimalai Hills, Madras, IV. 1968, PN; 1 ex., Karikal, Pondicherry State, V. 1968, PN.

28. *Oocassida cruenta* (Fabricius, 1792)
1 ex., Coimbatore, 1,400 ft, Madras, XII. 1968, PN.

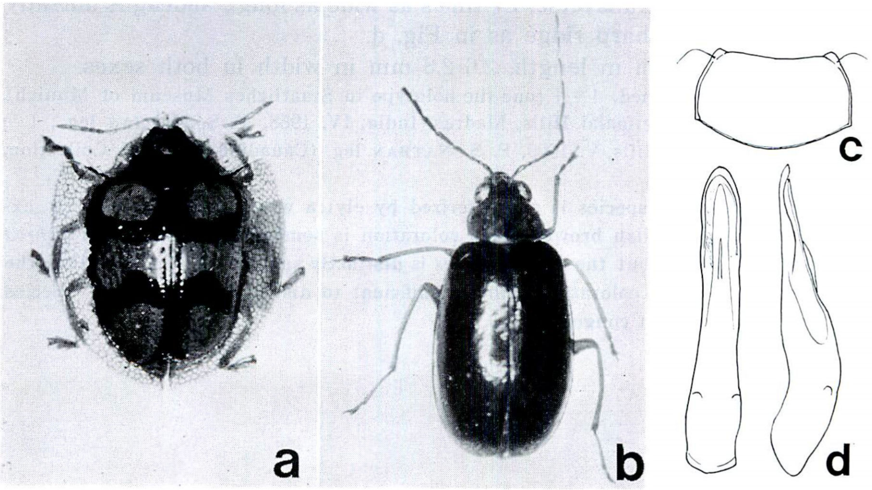
29. *Sindia clathrata* (Fabricius, 1798)
6 exs., Karikal, Pondicherry State, X. 1968, PN; 1 ex., Coimbatore, 1,400 ft, Madras, XI. 1968, PN.

Description of new species

Monolepta nathani n. sp. (Figs. b–d)

=*Monolepta* sp.: Takizawa, 1985, Kontyû, 53 : 569 (S. India).

Male. Body oblong-ovate; shining reddish brown with elytra shining black except for apical 1/8; legs and antennae with yellowish tinge.



Figs. a–d. a, *Chiridopsis sexplagiata* (Spaeth) from Cinchona; b, *Monolepta nathani* n. sp. from Cinchona; c, ibid, pronotum; d, ibid, male aedeagus (left: dorsal view, right: lateral view).

Head almost impunctate; vertex weakly raised; frontal tubercles contiguous to each other, delimited behind by a transverse depression, not well demarcated anteriorly; fronto-clypeus triangularly raised; interocular distance 1.5 times as wide as transverse diameter of large and convex eye; antenna slender, slightly shorter than ⅘ of body length, pubescent beyond 2nd segment; 4th to 9th slightly widened to apex; 4th segment longest, 3 times as long as 5th; relative lengths of antennal segments as: 4th≒11th> 5th≒6th≒7th> 1st≒8th≒9th≒10th> 3rd> 2nd. Pronotum (Fig. c) transverse, 1.7 times as wide as long, weakly but distinctly narrowed from base to anterior angle, almost straight at anterior margin, widely and archedly produced at posterior margin; anterior angle thickened and the posterior obtuse; disc evenly convex with a trace of very shallow median depression laterally, densely covered with small punctures on latero-anterior area; punctuation sparser on median and posterior portions. Scutellum shining and impunctate. Elytra distinctly wider than pronotum at base; each elytron 3 times as long as wide, gently widened from base to basal ⅓, roundly narrowed on apical ⅓; disc evenly convex, densely covered with small punctures, the diameter of which is smaller than their interspace; humerus developed; epipleuron wide and weakly concave on basal ⅓; surface shining and impunctate; last visible abdominal sternite tri-lobed; the median lobe flattened and transverse, 1.7 times as wide as long; aedeagus dorsally with a short and sharp ridge as in Fig. d.

Size. 4.8–5.0 mm in length, 2.6–2.8 mm in width in both sexes.

Specimens examined. 4♂♂ (one the holotype in Staatliches Museum of Munich), Cinchona, 3,500 ft, Anaimalai Hills, Madras, India, IV. 1968, P. S. NATHAN leg.; 1♀, Cinchona, Anaimalai Hills, V. 1969, P. S. NATHAN leg. (Canadian National Collection, Ottawa).

Note. This new species is characterized by elytra which are largely black except for apical ⅛ reddish brown. This coloration is somewhat similar to *M. dichroa* (HAROLD) from Japan, but the latter species is distinctly smaller (3.2–3.6 mm) than the present species. The coloration alone is sufficient to distinguish this new species from the known Indian congeners.

Taiwanese Elateridae Collected by Mr. M. YAGI, with the Descriptions of Some New Taxa (Coleoptera)

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When the ordinary meeting of the Japan Coleopterological Society in December, 1985, through the courtesy of Mr. MASAMICHI YAGI I had received a lot of elaterid-beetles collected from Taiwan by himself in May of the same year for the determination. The present report is the result of my studying based on the material, though I beg his pardon for my long delay contrary to his expectation.

The material is formed by 20 species consisting of 43 specimens, of which six are new specific taxa: *Neopsephus takasago, Ampedus masamichii, A. yagii, Melanotus babai, M. takasago* and *M. yagianus*. In these new species, however, on two *Melanotus*-species (*babai* and *takasago*) I prearrange to describe in the other paper (Trans. Essa ent. Soc., 1989) used many additional examples. Moreover, *Neopsephus takasago* was concluded too that represents a new generic status under the tribe Dicrepidiini of the Elaterinae.

Before going further I wish to express my hearty thanks to Mr. M. YAGI for his kind offering me an opportunity to study these interesting elaterids. The holotype specimens of the new taxa are deposited in my private collection.

1. *Campsosternus gemma* CANDÈZE, 1857

"Akaheri-ô-ao-kometsuki"

Campsosternus gemma CANDÈZE, 1857, Monogr. Élat. I, Mém. Soc. r. Sci. Liège, 12 : 344 (Chang-Hai).

1 ♂, Mt. Kuangtou-shan, Nantou Hsien, May 23, 1985, M. YAGI leg.

2. *Agrypnus* (*Agrypnus*) *polishaensis* ÔHIRA, 1977

"Polisha-sabikikori"

(Figs. 5 & 21)

Agrypnus (*Agrypnus*) *polishaensis* ÔHIRA, 1977, Elytra, 5 (2) : 33-34, figs. 1 & 2 (Nanshanchi, Mt. Rara & Polisha).

1 ♂, Mt. Kuangtou-shan, Nantou Hsien, May 23, 1985, M. YAGI leg.

〔Ent. Rev. Japan, Vol. XLV, No. 1, pp. 11-27, pls. 1-2, June, 1990〕

3. *Hemicrepidius* (*Alcimathous*) *tattakensis* (MIWA, 1928), comb. nov.

"Tattaka-marumune-kometsuki"

(Figs. 6 & 22)

Paradima tattakensis MIWA, 1928, Ins. Mats., 3 (1) : 38, Pl. 1, fig. 1 (Tattaka in Formosa).

1 ♂, Pilu Simmu, Hoelian Hsien, May 22, 1985, M. YAGI leg.

Originally, this Hemicrepidiine-species was combined under the Dimine group as only species representing a new genus *Paradima* MIWA, 1928 as cited above. He revised, however, the generic status to *Athous* in 1931, and as the result of this treatment the *Paradima* was synonymized to *Athous*. And afterwards (1934) moreover, he disserted that the species belongs to the subgenus *Alcimathous* REITTER, 1905 (type-species: *Athous sacheri* KIESENWETTER, 1858, monotypic) under the genus *Athous*.

The male example collected in this time, which is the second report of this species since the original description and is the first record as the male specimen, has a close similarity to the Japanese species *Athousius humeralis* (MIWA, 1927) in the general outline and coloration. But, its expanded and lobed tarsal joints in 1st, 2nd and 3rd are undoubtedly the marked structures in the Hemicrepidiine-elaterids. So far as I know, the present example corresponds generally with an image of *Alcimathous* according to the original description by REITTER (1905). Especially, the simple hind angles of the prothorax without carination, the antennal serration from 3rd joint to 10th and expanded tarsal segments as stated above are certainly the characteristic diagnoses in the genus.

MIWA described two species under *Athous* (*Alcimathous*) from Taiwan: *Paradima tattakensis* of 1928 revised to *Athous* (*Alcimathous*) in 1934, and *Athous* (*Alcimathous*) *temperatus* in 1930. Judging from MIWA's descriptions, the present male example collected by Mr. YAGI may be determined to the former, because it has the flattened scutellum. Male genitalia, more, is as figured (fig. 22).

4. *Neopsephus takasago* KISHII, gen. et sp. nov.

According to the literature, in the externality this Dicrepidiine-species somewhat resembles some Southeast-Asian species: *Sphenomerus duporti* FLEUTIAUX, 1928 (Tonkin), *S. bonnottei* FLEUTIAUX, 1928 (Laos et Cambodge) or some small species of *Elius* CANDÈZE, 1879. Although, the small 3rd joint of antenna, distinctly sinuated prosterno-pleural sutures and the strange shaped formation of bursa copulatrix in the present species are clearly unique as compared with the known species of the Dicrepidiine group. As the result of the deliberate scrutiny, I draw a conclusion that the species is a new taxon in the generic and specific status.

Neopsephus gen. nov. (Elaterinae, Dicrepidiini)

"Taiwan-hiraashi-kometsuki-zoku"

Type-species: *Neopsephus takasago* KISHII, gen. et sp. nov.

Female. Brownish entirely. Pubescence long, dense, thick, semierect, and tawny with golden lustre. Robust, subcylindrical, parallel-sided and rather elliptic. Head not so deflexed, rather flattened; frons slightly declivous; anterior margin of frons roundly enlarging ahead and definedly limited; frontal groove broad and faced underwards; mouthparts entirely protruded down; labrum crescent-formed. Antennae slender with 4th to 11th joints filiform; 2nd and 3rd small, but the latter a little longer than the former; 4th a little longer than combined length of two preceding joints together. Pronotum broad, plainly convex roundly above antero-medianly; lateral margins entire and straight, parallel at basal half and roundly convergent anteriorly; hind margin straight transversely with a pair of small projections at middle and a small conspicuous notch near each hind angle; hind angles acutely extending posteriorly, not divergent outwards, but a little expanded at bases laterally, each with an obscure short carination. Scutellum subpentagonal, flattened and feebly declivous ahead. Elytra with striae perfect having punctures and strial grooves; apices moderate. Prosterno-pleural sutures broad, conspicuously sinuated before procoxal cavities, then divergingly extending ahead, with anterior ends distinctly furrowed broadly. Prosternal process thick in profile, with apex largely excavated. Mesosternal groove deep, rhombic, concave at middle, with anterior end furrowed shallowly and bifurcated. Metasternum with a fine medio-longitudinal canaliculation. Metacoxal plates narrow, a little broadened near bases. Legs stout, with 1st tarsal joint longest, thick and simple at apical end, 2nd triangular having a distinct lobe at apico-inferior end, but lobe usually shorter than joint length, 3rd small, rather subquadrate and rather shorter than width, having a long lobe which is always longer than joint length, 4th smallest and simple, 5th elongate and simple, and claws moderate without basal seta. Bursa copulatrix with a sclerotized U-shaped and tube-like formation. Male unknown.

Remarks. This new genus is well remarkable from other Dicrepidiine genera in the structures of antennae, prosterno-pleural sutures, prosternal process, mesosternal groove and the sclerotized formation of bursa copulatrix. The small 2nd and 3rd antennal joints in this genus are somewhat allied to the main diagnosis of *Lampropsephus* FLEUTIAUX, 1928 (type-species : *Psephus cyaneus* CANDÈZE, 1878, Himalaya), though the short and dentate antennae and the blue body with metallic tint in the latter: "Bleu ou violet métallique. Antennes n'atteignant pas la base du prothorax, …… comprimés et dentés" (FLEUTIAUX, 1928), are exceedingly heterogeneous for the present new genus and easily distinguishable mutually.

Moreover, it may be separable from *Sphenomerus* CANDÈZE, 1859 (type-species: *Sphenomerus antennalis* CANDÈZE, 1859, Ceylan), some species of which distribute widely in the Southeastern Asia and are closely similar to the outward seeming, by the antennal structures, namely in *Sphenomerus* the length ratio from 2nd to 4th

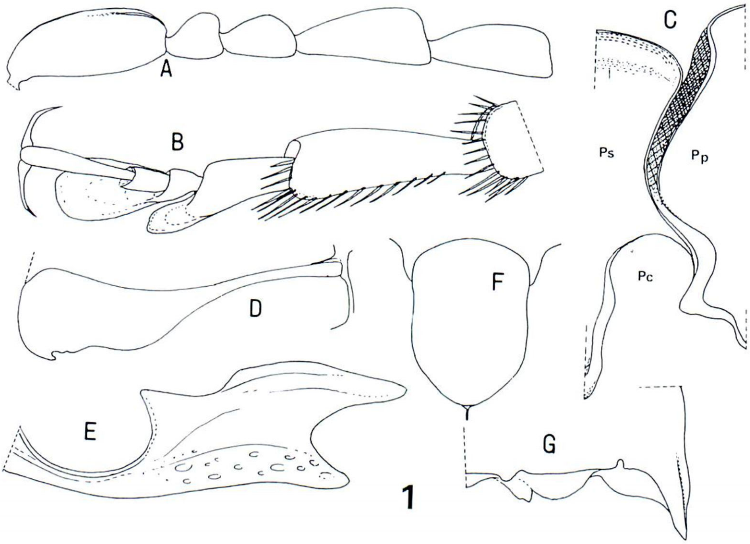

Fig. 1. *Neopsephus takasago* KISHII, gen. et sp. nov.
A. antenna, 5 basal joints ; B. metatarsus ; C. ventral surface of prothorax, Pc : procoxal cavity, Pp : propleuron, Ps : prosternum ; D. metacoxal plate ; E. prosternal process in profile ; F. scutellum ; G. latero-posterior angle of pronotum.

joint is generally 2<3<4 and 2+3>4, and each form of the two latter joints is nearly the same as one another.

Neopsephus takasago KISHII, sp. nov.

"Taiwan-hiraashi-kometsuki"

(Figs. 1, 7 & 29)

Female, 11.10×3.35 mm. Stout, rather elongate, feebly depressed medio-longitudinally above, parallel-sided from middle of prothorax to beyond middle of elytra. Distinctly opaque on head and pronotum, but clearly shining on elytra and ventral surface. Brown entirely, with head and pronotum except of hind border rather infuscate. Pubescence plainly long, thick, semierect, rather dense and tawny with clear lustre.

Head rather narrow, flattened medianly, feebly convex transversely before middle, slightly declivous antero-inferiorly ; relative breadth of each eye and vertex across eyes in dorsal aspect as 21 : 60 (ca. 2.9 times) ; anterior margin of frons well-limitedly carinate antero-roundly. Vertical punctures conspicuously ocellate, weakly oblong longitudinally, large and dense, but generally a little uneven in scale, with interpunctate surface entirely smooth and exceedingly narrow, sometimes rather obsolescent.

Antennae (fig. 1A) elongate, slender, exceeding apex of each hind angle of prothorax by apical two joints or more; relative joint lengths and widths in basal joint to 5th as 30/12, 10.5/9, 14/9, 25.5/10 and 23/10 respectively (length/width); basal joint robust and cylindrical with a short carina at apico-anterior edge, 2nd triangular, 3rd subclavate, 4th to 10th filiform, 11th elongate rhombic and longer than 10th, and each joint with elongate recumbent and dense pubescence all over.

Pronotum stout and broad, well convex above dome-likely at antero-medianly, without any suture nor line medianly, but a vestige of feeble medio-longitudinal impression on hind slope only; lateral sides parallel posteriorly, and roundly and gently narrowing anteriorly; relative median length and width as 72 : 100. Hind angles (fig. 1G) elongate, acutely pointed at apices, not diverging laterally, but a little expanded outwards at bases, each with a short indistinct carination; basal grooves small, but obvious without anterior longitudinal impression. Discal punctures generally similar to those on vertex, but more elliptic in shape and a little denser, partly reticulated each other, and becoming gently sparse and small towards posterior slope.

Scutellum (fig. 1F) subpentagonal, flattened entirely, slightly declivous antero-interiorly, subparallel-sided at anterior half, but slightly emarginated behind anterior angles; anterior edge feebly projected ahead; hind apex bluntly pointed; punctures small, distinctly sparse, single and uneven, with interstice surface entirely glabrous.

Elytra convex longitudinally; sutural length including scutellum and humeral breadth relatively as 100 : 42; sides parallel behind humeri to beyond middle, then gradually tapering posteriorly; sutural ends and elytral apices moderate with apical margins granulated finely; striae fine, narrowly grooved, with elongate deep discontinual punctures; strial intervals slightly elevated, having sparse single and small punctures with interstice surface entirely smooth.

Prosternum (fig. 1C) obviously narrowed behind middle, then distinctly divergingly broadened anteriorly as well as posteriorly, namely strongly sinuated before procoxal cavities; anterior rim moderately rounded ahead and a little bent down obliquely; punctures subocellated, circular entirely, not so small but plainly irregular in scale and density, with interstice surface smooth. Prosternal process well elevated down between procoxae, in profile (fig. 1E) thick with a distinct round excavation at apex. Prosterno-pleural sutures conspicuously sinuated before procoxal cavities, broad as double-like, smooth, with anterior ends broadly and deeply furrowed from apices to near middle. Propleuron broad and rather flattened, with punctures more or less larger and evener than on prosternum, but on posterior surface entirely smooth widely without any punctures. Metasternal punctures smaller and a little denser than on propleural ones. Metacoxal plates (fig. 1D) narrow laterally, with each base slightly broadened. Legs (fig. 1B, metatarsi) robust, with tarsal joints exceedingly lobed at 2nd and 3rd joints apically. Sclerotized formation in bursa copulatrix as figured (fig. 29) ; tube-like, U-shaped and well chitinous.

Male unknown.

Holotype, ♀, Mt. Kuangtou-shan, Nantou Hsien, Taiwan, May 25, 1985, M. Yagi leg.

5. *Gamepenthes montivagus* (Miwa, 1929)

"Taiwan-kimadara-kometsuki"

(Fig. 8)

Melanoxanthus (s. str.) *montivagus* Miwa, 1929, Trans. nat. Hist. Soc. Formosa, 19 (105): 491-492 (Arisan, Kwarenkô & Kayahara in Formosa).

1 ♀, Mt. Kuangtou-shan, Nantou Hsien, May 23, 1985, M. Yagi leg.

6. *Xanthopenthes granulipennis* (Miwa, 1929)

"Samehada-ki-kometsuki"

(Fig. 9)

Elater (*Ectamenogonus*) *granulipennis* Miwa, 1929, Trans. nat. Hist. Soc. Formosa, 19 (105): 489 (Musha in Formosa).

1 ♀, Mt. Kuangtou-shan, Nantou Hsien, May 23, 1985, M. Yagi leg.

7. *Procraerus* (*Procraerus*) *koshunensis* (Miwa, 1929), comb. nov.

"Taiwan-hoso-ki-kometsuki"

(Figs. 10 & 28)

Megapenthes koshunensis Miwa, 1929, Trans. nat. Hist. Soc. Formosa, 19 (105) : 494 (Koshun in Formosa).

1 ♀, Mt. Kuangtou-shan, Nantou Hsien, May 25, 1985, M. Yagi leg.

Since the original description in 1929 this Megapenthine-species had not reported up to date. On the present female specimen in having the small and isomorphic 2nd and 3rd antennal joints and the normal formed elytral ends, I determined that belongs undoubtedly under the genus *Procraerus* s. str., but I entertain some misgivings about my determination in the specific status on account of the original description is too brief to identify for the exact determination. It conforms quite, notwithstanding, to the delineation stated in Miwa's description on the outline of body and the coloration.

8. *Ampedus* (subgen. ?) *tattakensis* Ôhira, 1966

"Tattaka-kuro-kometsuki"

(Fig. 11)

Ampedus (*Ampedus*) *tattakensis* Ôhira, 1966, Kontyû, 34 (3) : 270 (Sungkang in Formosa).

1 ♂, 1 ♀, Pilu Simmu, Hoelian Hsien, May 22, 1985, M. Yagi leg.

9. *Ampedus* (*Ampedus*) *masamichii* Kishii, sp. nov.

"Taiwan-kuro-kometsuki"

(Figs. 2, 13 & 23)

Ampedus (*Ampedus*) *cambodiensis* : Kishii, 1981, Bull. Heian High Sch., 25 : 22, fig. 16 (Nanshanchi in Formosa), nec *Elater cambodiensis* Fleutiaux, 1918, Ann. Soc. ent. France, 87 : 214 (Cambodge), misdetermined.

2 ♀♀, Mt. Kuangtou-shan, Nantou Hsien, Taiwan, May 23-25, 1985, M. Yagi leg.

In 1981, I reported *Ampedus cambodiensis* collected from Taiwan by Mr. M. Yagi, though according to my latest elaborate study the specimens used in the then paper conform entirely in all the structures to the present material cited above, and they are undoubtedly distinguishable from *cambodiensis* of Fleutiaux in some important diagnoses. As a prudent judgement for these examples, I concluded that this *Ampedus* is a distinct species and should be added newly to the science as described below. And more, on the true *cambodiensis* from Taiwan already had reported by Miwa (1929 & 1934) and Ôhira (1966 & 1972), and I could make also an examination of some specimens from Mt. Arisan collected by Mr. A. Shinohara through the courtesy of Mr. K. Mizuno.

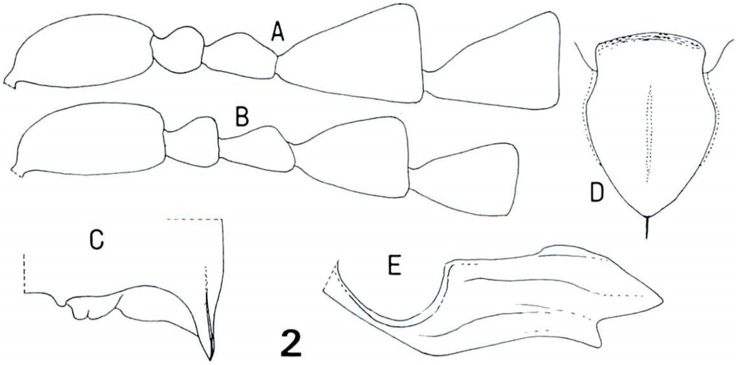

Fig. 2. *Ampedus* (*Ampedus*) *masamichii* Kishii, sp. nov.
A. male antenna, 5 basal joints ; B. female antenna, ditto ; C. latero-posterior angle of pronotum ; D. scutellum ; E. prosternal process in profile.

Male, 8.20-8.40×2.45-2.50 mm; female, 9.20-10.75×2.60-3.00 mm. Narrow, subparallel-sided, subcylindrical, rather stout and elevated longitudinally above as well as below. Remarkably shining all over. Black entirely with antennae and legs somewhat feebly dusky reddish partly. Pubescence rather long, strong, not so dense, semierect and black with distinct tint.

Head broad, roundly convex above medianly; relative each eye breadth and vertex width between middle point of inner side of each eye in upper views as 8 : 54 (ca. 6.8 times) (male), and 8 : 64 (8 times) (female); frons clearly declivous antero-inferiorly, rather triangularly projecting ahead and more or less flattened; anterior edge of frons plainly defined upon antennal sulci, then substraightly extending to middle, but becoming gradually obsolescent medianly; antennal sulci broad, shallow and subovate; frontal groove narrow, indistinct medianly and not furrowed. Vertical punctures circular, simple and rather dense, but plainly uneven in size and density, with interstice surface among punctures entirely glabrous; average distance between punctures subequal to each puncture diameter (male), or rather narrower (female).

Antennae distinctly longer than combined length of head and prothorax including hind angles by apical one joint or more (male), or plainly shorter and attaining barely to bases of hind angles (female); relative joint lengths and widths from basal joint to 5th respectively as 18/7.5, 6.5/6, 10/7, 20/13 and 17.5/13 (length/width, male, holotype) (fig. 2A), and 20/9.5, 8/7, 10/6.5, 16/12 and 15/12 (female) (fig. 2B); basal joint cylindrical and robust, 2nd subglobular, 3rd rather clavate, 4th to 10th distinctly serrated.

Pronotum well convex above dome-likely, with any median suture nor impression even on hind slope; relative median length and width as 89 : 100 (male) and 84 : 100 (female); lateral sides subparallel basally, then roundly and gently convergent ahead; hind angles (fig. 2C) parallel (male) or feebly diverging postero-exteriorly (female), not so elongate and rather acutely pointed, with obvious short unicarination. Discal punctures more or less similar to those on vertex in both sexes, but a little sparser and becoming gradually sparse and small towards lateral borders as well as rear slope; average distance between punctures at middle exceedingly (male) or a little (female) broader than each puncture diameter; surface entirely smooth and conspicuously brilliant.

Scutellum (fig. 2D) well declined antero-inferiorly, generally flattened, with a vestige of medio-longitudinal smooth elevation in some specimens (including holotype); anterior edge a little upheaved roundly with some transverse creases along edge narrowly, lateral sides slightly narrowed behind anterior angles, plainly expanded outwards roundly near middle, then substraightly converging apically; hind apex rather acute; relative median length and maximum width as 25 : 18.5; punctures fine, sparse, rather countable easily, single and unevenly set, with interstice smooth.

Elytra widest at humeri, subparallel behind humeri to near middle, then substraightly narrowing to apices; sutural ends behind scutellum distinctly elevated triangularly and posterior ends moderate with a feeble crevice between elytral apices; striae fine with elongate, deep and discontinuous punctures and narrow groove, which is visible at 1st to 5th or 6th stria and other striae ungrooved; strial intervals rather flattened and smooth with plainly fine, rather obsolescent and sparse punctures.

Prosternum not so broad, feebly convex longitudinally; anterior rim roundly expanded declivously down, with some weak creases behind base of rim transversely; punctures circular, deep and plainly irregular in size and density, with interstice among punctures entirely glabrous. Prosternal process in profile (fig. 2E) thick, clearly bent inwards behind procoxae and not so elongate, with a distinct emargination at apex. Prosterno-pleural sutures broad, smooth, a little curved and divergently protruding ahead, with anterior ends shallowly and widely furrowed. Propleuron broad, with punctures denser and larger than those on prosternum. Metasternal punctures smaller, denser and evener than on propleuron. Legs moderate. Male genitalia and thorny spines in bursa copulatrix of female as figured (fig. 23).

Holotype, ♂, Nanshanchi, Nantou Hsien, Taiwan, March 21, 1980, M. YAGI leg. Paratypes, 1♂, 1♀, ditto, February 19, 1980, M. YAGI leg.; 2♀♀, ditto, March 19, 1980, M. YAGI leg.; 1♀, ditto, March 21, 1980, M. YAGI leg.; 2♀♀, Mt. Kuangtou-shan, Nantou Hsien, Taiwan, May 23 & 25, 1985, M. YAGI leg.

As stated the exordium, this new black *Ampedus*-species has closely intimate appearances to *A. cambodiensis* (FLEUTIAUX, 1918), but the former is generally smaller than the latter, and the shape of the apico-lateral expansion of each paramere in male genitalia and the length and form of thorny spines on female bursa copulatrix are easily distinguishable one another. More, it resembles the common Japanese species: *A. tenuistriatus*, however, the elevated sutural ends behind the scutellum in *masamichii* are remarkably unique among the black *Ampedus*.

10. *Ampedus* (*Ampedus*) *yagii* KISHII, sp. nov.

"Taiwan-hoso-kuro-kometsuki"

(Figs. 3, 12 & 24)

Female, 8.80×2.35 mm (holotype) and 8.75×2.55 mm (paratype). Elongate, parallel-sided, rather flattened, a little stout and clearly shining all over. Black entirely with antennae exclusive of reddish yellow 2nd and 3rd joints, apices of mouth parts and legs exclusive of reddish

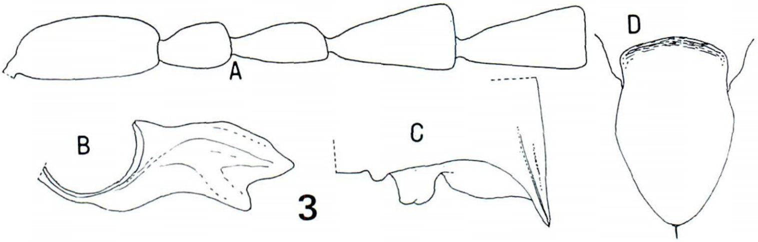

Fig. 3. *Ampedus (Ampedus) yagii* Kishii, sp. nov.
A. antenna, 5 basal joints; B. prosternal process in profile; C. latero-posterior angle of pronotum; D. scutellum.

yellow tarsi more or less dusky brown. Pubescence long, thick, rather erect, not so dense and blackish.

Head rather broad, roundly convex above medianly and simply; relative each eye width and vertex breadth across eyes in upper aspect as 8 : 50 (ca. 6.3 times); frons triangular, slightly elevated, and clearly declivous antero-inferiorly; frontal edge of frons upheaved before eyes, then straightly protruding medianly and well-carinated, but obsolescent and simply convex at middle, namely obscurely conglutinated with under margin of frontal groove; antennal sulci broad, shallow and entirely sculptured with microgranules; frontal groove narrow, barely visible at anterior ends of antennal sulci, and almost obscure at middle. Vertical punctures circular, subocellated, uneven in density and scale, with interval surface among punctures smooth; average distance between punctures subequal to puncture diameter.

Antennae subequal to combined length of head and prothorax including hind angles or a little longer; relative joint lengths and widths from basal joint to 5th as 17/8, 9/6, 11.5/6, 15.5/9 and 15/9 respectively (length/width, holotype) (fig. 3A); basal joint well expanded and barrel-formed, 2nd subobconical, 3rd elongate triangular or subclavate, and 4th to 10th moderately serrated.

Pronotum subtrapezoid, subparallel-sided behind middle to apices of hind angles, then gently and roundly narrowing ahead, and simply convex above roundly without any median line nor furrow even on posterior slope; relative median length and maximum width as 86 : 100; hind angles (fig. 3C) parallel each other, extending posteriorly, with apices thick and not so acute, having a short carina on inner side of each angle, but in holotype specimen visible barely an indistinct elevation between lateral side and carination; hind margin substraight transversely and simple, with a pair of weak nodulous projections at middle; discal punctures simple, plainly smaller and sparser than on head, but more or less uneven in density, becoming sparser and finer towards posterior slope, and denser to lateral borders, with interpunctate surface entirely glabrous.

Scutellum (fig. 3D) tongue-shaped, rather elongate, flattened and moderately declivous antero-inferiorly; frontal edge roundly expanded ahead and feebly elevated with many small transverse sutures along edge narrowly; sides weakly constricted behind anterior angles, slightly expanded near middle, then roundly convergent to apex, which is entirely rounded; punctures conspicuously minute and sparse.

Elytra subparallel basally, then gently narrowing posteriorly; anterior ends of sutures moderate, not elevated; striae fine, with elongate, deep, not so large and discontinual punctures, without grooves connecting each puncture entirely exclusive of 1st striation; strial intervals smooth and flattened with exceedingly fine and sparse punctures; postero-sutural extremities feebly projected and elytral ends moderate-formed, but forming a narrow crack between both apices of elytra.

Prosternum not broad, convex down longitudinally; frontal rim well-developed antero-inferiorly subcrescently, and a little bent downwards; punctures similar to those on pronotum, though feebly sparser; surface generally glabrous. Prosternal process thick, bent inwards behind procoxae, then shortly extending rearwards, with a weak emargination at apex in profile (fig. 3B). Prosterno-pleural sutures distinctly broad, smooth, slightly curved and divergingly extending ahead, with anterior ends widely and deeply furrowed. Propleural punctures elongate longitudinally, plainly larger and denser than those of prosternum. Mesosternal punctures clearly finer and sparser than on prosternum. Legs moderate. Thorny spines on bursa copulatrix as figured (fig. 24), narrow, not so thick, and ca. 45.

Male unknown.

Holotype, ♀, Mt. Kuangtou-shan, Nantou Hsien, Taiwan, May 23, 1985, M. YAGI leg. Paratype, 1♀, ditto, May 25, 1985, M. YAGI leg.

Somewhat the present new species resembles small individuals of common Japanese species: *A. tenuistriatus* (LEWIS, 1894), though the one has sparse punctures on the pronotum, narrow prothorax, short and thick prosternal process in profile and less tenderer and narrower thorny spines on bursa copulatrix compared with the other.

11. *Ectinus sonanis* (MIWA, 1928)

"Sonan-munaboso-kometsuki"

(Fig. 16)

Agriotes sonanis MIWA, 1928, Ins. Mats., 3 (1) : 45, Pl. 1, fig. 10 (Musha in Formosa).

4 ♂♂, 9 ♀♀, Pilu Simmu, Hoelian Hsien, May 22, 1985, M. YAGI leg.

12. *Ectinus nokozanus* (MIWA, 1928)

"Nôkô-munaboso-kometsuki"

(Fig. 17)

Agriotes nokozanus MIWA, 1928, Ins. Mats., 3 (1) : 45-46, Pl. 1, fig. 11 (Mt. Nôkô in Formosa).

1 ♀, Mt. Kuangtou-shan, Nantou Hsien, May 25, 1985, M. YAGI leg.

13. *Silesis sauteri sauteri* MIWA, 1930

"Sauter-kuchibuto-kometsuki"

(Fig. 15)

Silesis Sauteri MIWA, 1930, Wien. ent. Zeit., 47 (2) : 95-96 (Fuhosho, Kosempo, Taihorin, Taihorinsho, Horisha, Musha, Mt. Arisan, Tabo & Shinchiku in Formosa).

1 ♂, Mt. Kuangtou-shan, Nantou Hsien, May 23, 1985, M. YAGI leg.

14. *Glyphonyx rubricollis* MIWA, 1928

"Seaka-kuchiboso-kometsuki"

(Fig. 14)

Glyphonyx rubricollis MIWA, 1928, Ins. Mats., 3 (1) : 49-50, Pl. 1, fig. 16 (Arisan, Horisha, Kagi, Kôshun, Ranrun, Tompo, Baibara & Takesaki in Formosa).

1 ♂, Pilu Simmu, Hoelian Hsien, May 22, 1985, M. YAGI leg.

15. *Melanotus* (*Spheniscosomus*) *melanotoides melanotoides* (MIWA, 1930)

"Kuriiro-ohkushi-kometsuki"

(Fig. 18)

Spheniscosomus melanotoides MIWA, 1930, Trans. nat. Hist. Soc. Formosa, 20 (107) : 61 (Mt. Arisan, Musha, Kwarenkô & Horisha in Formosa).

3 ♀♀, Mt. Kuangtou-shan, Nantou Hsien, May 25, 1985, M. YAGI leg.

16. *Melanotus* (*Spheniscosomus*) *frequens* (MIWA, 1930)

"Hirata-ohkushi-kometsuki"

(Fig. 26)

Spheniscosomus frequens MIWA, 1930, Trans. nat. Hist. Soc. Formosa, 20 (107) : 61-62 (Horisha, Mt. Arisan, Musha, Mt. Niitaka, Kyuhabon, Sankakuhô & Mt. Nôkô in Formosa).

1 ♂, Pilu Simmu, Hoelian Hsien, May 22, 1985, M. YAGI leg.

The pubescence coloration of the present example is perfectly whitish instead of fulvous one in the typical specimen of this species, and the apex of median lobe of the aedeagus is clearly broad and not narrowed as the latter (fig. 26). Moreover, in some characteristics this male sample is more or less different from the material collected from the western side of the central mountain range (Chungyan-shanmou). It may be a distinct species from *frequens*, but for the decision the material is too scant at present.

17. *Melanotus* (*Spheniscosomus*) *babai* KISHII, 1989

"Baba-ohkushi-kometsuki"

Melanotus (*Spheniscosomus*) *babai* KISHII, 1989, Trans. Essa ent. Soc. Niigata, (68): 35-37, figs. 9, 27 & 46 (Too-nah near Mao-ling, Mt. Rara-san, Mt. Kuang-to Shan, Shyk Shan near Liu-kuei, Nan-feng Shan near Liu-kuei, Mei-fon near Ho-huan Shan & Ching-tu Shan near Too-nah in Formosa).

1 ♀, paratype, Mt. Kuangtou-shan, Nantou Hsien, May 23, 1985, M. YAGI leg.

18. *Melanotus* (*Melanotus*) *takasago* KISHII, 1989

"Takasago-kushi-kometsuki"

Melanotus (*Melanotus*) *takasago* KISHII, 1989, Trans. Essa ent. Soc. Niigata, (68): 44-45, figs. 14, 32 & 53 (Pilu Simmu, Chu-yun Shan near Liu-kuei & Lo-shan Spa in Formosa).

1 ♂, holotype, Pilu Simmu, Hoelian Hsien, May 22, 1985, M. YAGI leg.

On this new *Melanotus*-species the original description was described with that of the previous species in the same transactions cited above. As the holotype-specimen the male example collected by Mr. M. YAGI was used.

19. *Melanotus* (*Melanotus*) *yagianus* KISHII, sp. nov.

"Yagi-kushi-kometsuki"

(Figs. 4, 19 & 25)

Male, 14.80×4.00 mm. Elongate fusiform, stout parallel-sided, well depressed above as well as beneath and subopaque entirely. Blackish brown entirely with antennae and legs more or less reddish brown. Pubescence long, rather dense, semierect, firm and fulvous all over.

Head rather narrow, less elevated between eyes; relative breadth of each eye and vertical extent across eyes in upper aspect as 32 : 72 (ca. 2.3 times); frons rather broad and feebly depressed; anterior edge of frons distinctly angulated and a little upheaved before eyes, then well-definedly extending roundly to middle; frontal groove wide and rather deep, excavated clearly and faced down, with some sparse fine punctures on surface sculptured by minute shagreen-like granules all over. Vertical punctures large, circular, umbilicated entirely and dense, but irregular in density and scale, with surface among punctures shagreened; average distance between punctures always narrower than puncture diameter.

Antennae a little exceeding apices of pronotal hind angles by each terminal joint; relative joint lengths and widths from basal joint to 5th as 35/16, 13/10.5, 21/11, 28/17.5 and 28/18 respectively (length/width) (fig. 4A); basal joint cylindrical and plainly rounded, 2nd globular, 3rd elongate triangular or rather subclavate, and 4th to 10th serrated with long hairs and short dense erect pubescence.

Pronotum not broad, weakly convex above roundly at middle, at a glance having neither median furrow nor line, though a vestige of smooth medio-longitudinal carina visible near middle under the regulation of light; sides well ridged, parallel medianly one another in dorsal views, then gently and roundly narrowing anteriorly; relative median length and width as 88 : 100; postero-lateral corner (fig. 4C) thickly developed rearwards, slightly narrowed at bases, then less divergently protruding posteriorly, with apices acute and distinctly unicarinated; basal furrows obviously grooved, with anterior canaliculations elongate and divergingly extending ahead, and with postero-interio edge almost straight and simple without any nodulous expansion. Discal punctures longitudinally oblong, subocellated and moderately dense, though becoming exceedingly denser and larger toward lateral margins as well as hind slope, and partly reticulated mutually; surface entirely glabrous.

Scutellum (fig. 4D) elongate quadrate, plainly declivous anteriorly and generally flattened; relative median length and width as 38 : 27; anterior margin substraightened and feebly elevated above; lateral sides rather parallel, but weakly narrowed behind anterior angles; hind apex

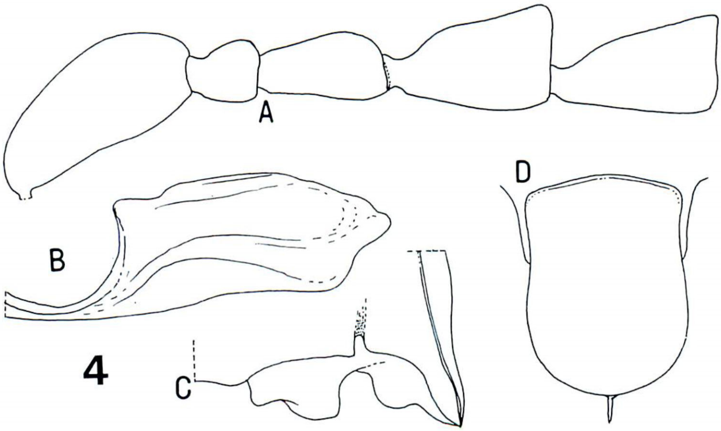

Fig. 4. *Melanotus* (*Melanotus*) *yagianus* Kishii, sp. nov.
A. antenna, 5 basal joints; B. prosternal process in profile; C. latero-posterior angle of pronotum; D. scutellum.

rounded; surface finely shagreen-likely sculptured entirely with some small sparse punctures.

Elytra slightly elevated longitudinally, elongate, subparallel-sided basally, then gently tapering posteriorly; humeri well-angulated, each with a feeble excavation behind humeral angle; striae fine with elongate and discontinuous punctures and narrow groove connecting with punctures; strial intervals rather flattened exclusive of elevated bases; surface smooth with uneven fine and sparse punctures.

Prosternal punctures single, distinctly minute and sparse at middle, but becoming suddenly denser and larger laterally, with interspace among punctures smooth entirely. Prosternal process in profile (fig. 4B) thick, weakly bent interiorly behind procoxae, then straightly extending backwards, with apex feebly excavated. Prosterno-pleural sutures broad, glabrous, a little divergingly and substraightly extending ahead, with anterior ends shallowly furrowed. Propleural punctures conspicuously oblong longitudinally, dense, even and single, with interspace among punctures smooth. Metasternal punctures generally similar to those of propleura in form, but a little smaller and sparser, with surface entirely shagreen-likely sculptured. Legs moderate. Male genitalia as figured (fig. 25), broad; median lobe parallel-sided mainly, with apex widely triangular; latero-apical expansion of each paramere rounded and broad, with eight long hairs.

Female unknown.

Holotype, ♂, Mt. Kuangtou-shan, Nantou Hsien, Taiwan, May 25, 1985, M. YAGI leg.

In the appearance this new species is somewhat allied to *M. takasago* or several brownish species of the Taiwanese *Melanotus*, but in the former the broad and unique-formed aedeagus and the shagreen-likely sculptured propleural surface are distinct and may be easily distinguishable from these resemblers.

20. *Cardiotarsus rarus* MIWA, 1927

"Hiraashi-hana-kometsuki"

(Figs. 20 & 27)

Cardiotarsus rarus MIWA, 1927, Ins. Mats., 2 (2) : 108, fig. 4 (Musha in Formosa).

2 ♀♀, Mt. Kuangtou-shan, Nantou Hsien, May 23, 1985, M. YAGI leg.; 4 ♂♂, 1 ♀, ditto, May 25, 1985, M. YAGI leg.

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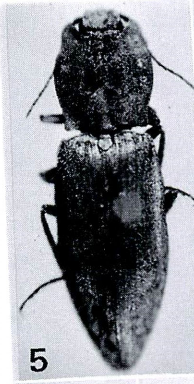
Explanation of plates 1-2.

Plate 1, Fig. 5. *Agrypnus* (*Agrypnus*) *polishaensis* ÔHIRA, 1977, ♂, 19.55 mm.
6. *Hemicrepidius* (*Alcimathous*) *tattakensis* (MIWA, 1928), comb. nov., ♂, 13.00 mm.
7. *Neopsephus takasago* KISHII, gen. et sp. nov., ♀, holotype, 11.10 mm.
8. *Gamepenthes montivagus* (MIWA, 1929), ♀, 7.40 mm.
9. *Xanthopenthes granulipennis* (MIWA, 1929), ♀, 12.95 mm.
10. *Procraerus* (*Procraerus*) *koshunensis* (MIWA, 1929), comb. nov., ♀, 6.85 mm.
11. *Ampedus* (subgen. ?) *tattakensis* ÔHIRA, 1966, ♂, 7.60 mm.
12. *Ampedus* (*Ampedus*) *yagii* KISHII, sp. nov., ♀, holotype, 8.80 mm.
13. *Ampedus* (*Ampedus*) *masamichii* KISHII, sp. nov., A. ♂, holotype, 8.40 mm ; B. ♀, paratype, 10.75 mm.
14. *Glyphonyx rubricollis* MIWA, 1928, ♂, 6.90 mm.
15. *Silesis sauteri sauteri* MIWA, 1930, ♂, 8.95 mm.
16. *Ectinus sonanis* (MIWA, 1928), ♀, 13.70 mm.
17. *Ectinus nokozanus* (MIWA, 1928), ♀, 11.75 mm.
18. *Melanotus* (*Spheniscosomus*) *melanotoides melanotoides* (MIWA, 1930), ♀, 18.80 mm.
19. *Melanotus* (*Melanotus*) *yagianus* KISHII, sp. nov., ♂, holotype, 14.80 mm.
20. *Cardiotarsus rarus* MIWA, 1927, A. ♂, 8.95 mm ; B. ♀, 10.75 mm.

Plate 2, Fig. 21. *Agrypnus* (*Agrypnus*) *polishaensis* OHIRA, 1977, A. male genitalia (4872) ; B. ditto, apical part.
22. *Hemicrepidius* (*Alcimathous*) *tattakensis* (MIWA, 1928), A. male genitalia (4873) ; B. ditto, apical part.
23. *Ampedus* (*Ampedus*) *masamichii* KISHII, sp. nov., A. male genitalia, holotype (5158) ; B. ditto, apical part, paratype (5157) ; C. thorny

Ent. Rev. Japan, Vol. XLV, Pl. 1.

June, 1990.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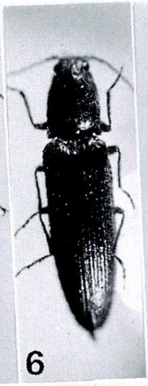
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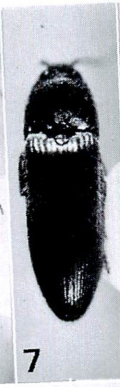
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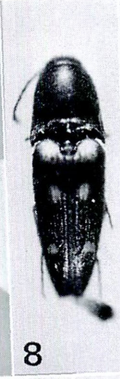
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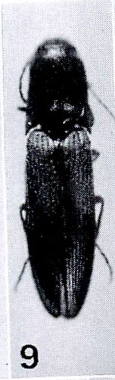
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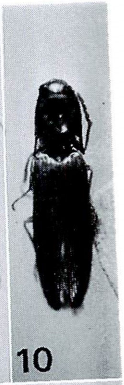
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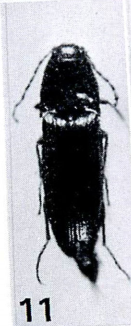
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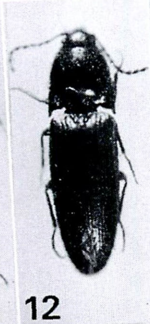
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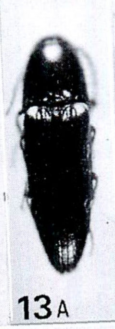
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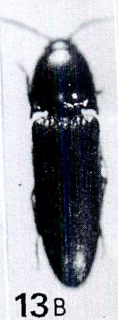
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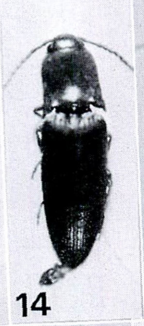
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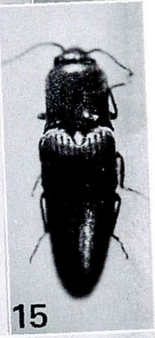
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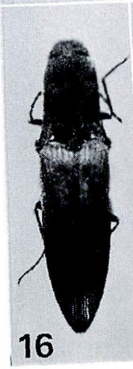
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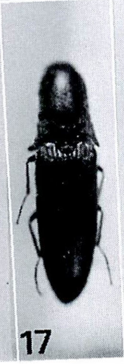
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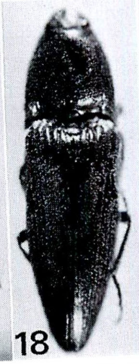
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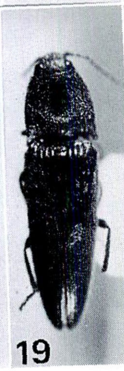
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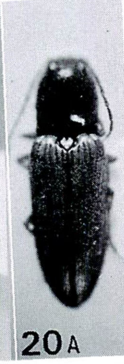
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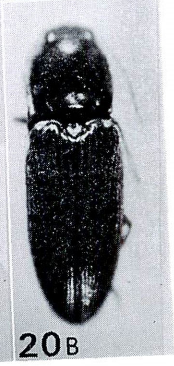
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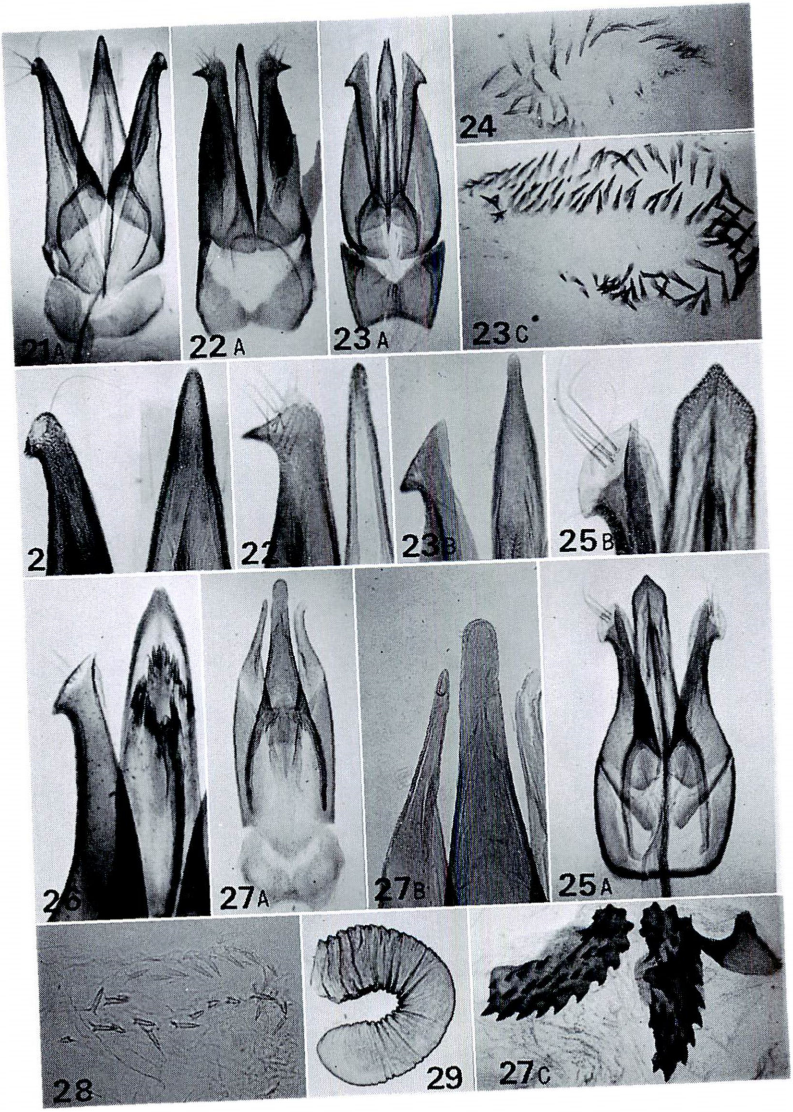
(T. Kishii photo.)

Ent. Rev. Japan, Vol. XLV, Pl. 2.

June, 1990.



(T. Kishii photo.)

spines in female bursa copulatrix, paratype (4866).

24. *Ampedus* (*Ampedus*) *yagii* KISHII, sp. nov., holotype, thorny spines in female bursa copulatrix (4863).
25. *Melanotus* (*Melanotus*) *yagianus* KISHII, sp. nov., holotype (4870), A. male genitalia ; B. ditto, apical part.
26. *Melanotus* (*Spheniscosomus*) *frequens* (MIWA, 1930), male genitalia, apical part (4868).
27. *Cardiotarsus rarus* MIWA, 1927, A. male genitalia (4862) ; B. ditto, apical part ; C. sclerotized plates in female bursa copulatrix (4861).
28. *Procraerus* (*Procraerus*) *koshunensis* (MIWA, 1929), thorny spines in female bursa copulatrix (4874).
29. *Neopsephus takasago* KISHII, gen. et sp. nov., sclerotized formation in female bursa copulatrix (4871).

Notes on Catopidae from Taiwan (II)

By YASUHIKO HAYASHI

Ptomaphaginus sauteri (PORTEVIN) (Figs. 1-6)

Ptomaphagus sauteri PORTEVIN, 1914, Suppl. ent., 3 : 5.

Ptomaphagus sauteri: HATCH, 1926, Col. Cat., pars 95 : 165.

Ptomaphaginus sauteri: JEANNEL, 1936, Mem. Mus. nat. Hist. natur., nouv. ser., 1 : 58, figs. 58-60.

Ptomaphaginus sauteri: SZYMCZAKOWSKI, 1956, Polsk. Pismo ent., 29 : 135.

Ptomaphaginus sauteri: SZYMCZAKOWSKI, 1964, Acta zool. cracov., 9 (2): 83-86, figs. 23-28.

Examined materials: 1♂, 2♀♀, Nanshanchi, Taichung Hsien, 6 and 7. IV. 1971, H. NOMURA leg.; 1♂, Mt. Yangmingshan, Taipei Hsien, 30. IV. 1982, T. ITO leg.

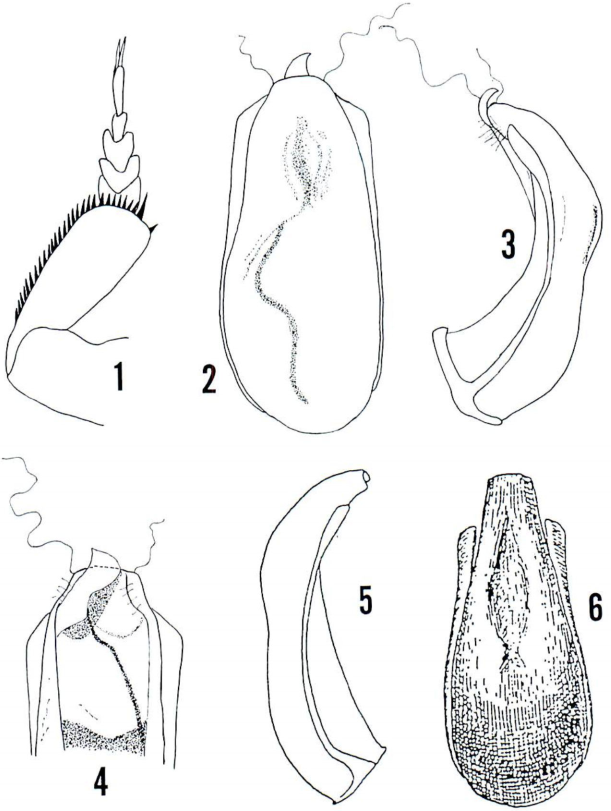
SZYMCZAKOWSKI gave a full and particular account of this species in 1964 by the female specimens including the paratype. After my careful examination of some materials, I found that the relative length of each antennal segment was rather variable between both sexes and/or among those specimens.

Notes: In ♂ 3rd segment of antennae considerably longer than that of female, but 6th, 8th and 11th rather shorter, and the relative length of each antennal segment shown in the following ratios (8th segment as 1): in the specimens from Mt. Yangmingshan, 7.3-5.1-3.8-2.1-2.3-1.5-3.0-1-3.1-3.1-5.6, and in the specimens from Nanshanchi, 6.3-5.0-3.4-2.0-2.4-1.7-3.0-1-3.1-3.1-5.6; protibiae (fig. 1) much thicker and stouter than those of the female; basal 3 segments of protarsi moderately dilated and with sparse long pubescence on lateral sides; penis (figs. 2-4), in dorsal view, rounded at base and gently narrowed from basal one-seventh to subtruncate apex, in lateral view, strongly bent ventrad at apical two-fifths, and feebly emarginate before the bend, dorsal side with a large, deep and fusiform depression subapically, apex with a sharp denticle (I consider it probably conforms a copulatory piece) stuck out of apical orifice, and with a pair of very long and fine furs at each dorso-lateral angle and some short furs at each ventro-lateral side; parameres thin, weakly thickened distally and firmly attached to penis. In ♀ relative length of each antennal segment shown in the following ratios (8th segment as 1): in one specimen, 5.0-3.5-1.8-1.5-1.8-1.6-2.1-1-2.3-2.1-4.2, and in the other, 6.9-5.0-3.1-2.5-2.5-2.3-3.3-1-3.6-3.3-6.3.

According to JEANNEL's figure (figs. 5, 6) in 1936 the above-mentioned denticle and furs were not illustrated, and the parameres were a little detached from the penis in the apical portion.

This species is closely allied to *P. rufus* JEANNEL from Singapore in having similar form of the male genitalia.

〔Ent. Rev. Japan, Vol. XLV, No. 1, pp. 29-35, June, 1990〕



Figs. 1-6. *Ptomaphaginus sauteri* (PORTEVIN).
1-4. from Mt. Yangming ; 5, 6. cited from JEANNEL, 1936.
1. male protibia ; 2, 6. male genitalia, in dorsal view ; 3, 5. ditto, in lateral view ; 4. ditto, ventral view of apical part.

Micronemadus pusillimus (KRAATZ)

Catops pusillimus KRAATZ, 1877, Deuts. ent. Zeit., 21 : 108.
Nemadus pusillimus : PORTEVIN, 1914, Ann. Soc. ent. Belg., 58 : 217.
Nemadus pusillimus : WINKLER, 1924-1927, Cat. Col. reg. pal. 1 : 286.
Nemadus pusillimus : HATCH, 1928, Col. Cat., 95 : 163.
Micronemadus pusillimus : JEANNEL, 1936, Mem. Mus. nat. Hist. natur., nouv. ser., 1 : 174, figs. 336-343.
Micronemadus pusillimus : SZYMCZAKOWSKI, 1964, Acta zool. cracov., 9 (2) : 156-168, figs. 164-171.
Micronemadus pusillimus : Y. HAYASHI, 1969, Ent. Rev. Japan, 22 (1) : 2-3, fig. 9.

Examined materials: 3♂♂, 2♀♀, Nanshanchi, Taichung Hsien, 3 and 7. IV. 1970 and 1971, H. Nomura and T. Kobayashi leg.; 1♂, 1♀, Mt. Alishan, Chiai Hsien, 2 and 17. V. 1981 and 1983, T. Ito leg.; 2♂♂, 3♀♀, Mt. Yangming, Taipei Hsien, 6. V. 1983, T. Ito leg.; 3♂♂, 1♀, Fenchiifu, Chiai Hsien, 18. VIII. 1969 and 27. III. 1970, T. Kobayashi and Y. Maeda leg.

Notes: Taiwanese specimens are very similar in general appearance to those from Amami Ohshima Is., Japan, the specimens of both localities differ a little from the specimens of Honshu, Japan in the following points: the body larger (Taiwan: 2.0-2.3 mm, Amami Ohshima Is.: 1.8-2.1 mm but Honshu: 1.5-1.8 mm) and a little more reddish in color, punctures on the pronotum and elytra finer and denser, the elytral interspaces among transverse striations somewhat narrower, basal angles of the pronotum more sharply angulate, however, the antennae and the male genitalia are very similar in structure to each other, no matter where the specimens are inhabited.

Anemadiola itotateoi sp. nov. (Figs. 7-10)

♂: Body oblong-oval, strongly convex, without any dorsal micosculpture, strongly shining and covered with yellowish recumbent short pubescence; reddish brown above and brown below, head blackish brown, pronotum widely darkened in middle. Length: 1.7 mm.

Head considerably narrower than pronotum (13 : 20), rather coarsely and sparsely punctate; clypeo-frontal suture not impressed but indicated clearly as a transverse line. Antennae (fig. 8) long, reaching hardly base of pronotum, 2nd to 5th segments thin, 7th to 11th subclavate, basal 5 segments, 7th and 11th more or less longer than wide; 1st segment thick, 1.5 times as long as wide, 2nd nearly twice as long as wide and a little longer than 1st (7 : 6), 3rd a little more than twice as long as wide and slightly shorter than 1st (14 : 15), 4th a little less than twice as long as wide and shorter than 3rd (5 : 7), 5th as long as 4th and considerably longer than wide (10 : 7), 6th three-fourths as long as wide or as 5th, 7th considerably longer than wide (7 : 5) and as long as 3rd, 8th twice as wide as long and two-thirds as long as 6th, 9th as wide as long, as 10th and 2.5 times as long as 8th, 10th a little wider than long or 9th (6 : 5), 11th the longest and as long as the preceding 2 segments together.

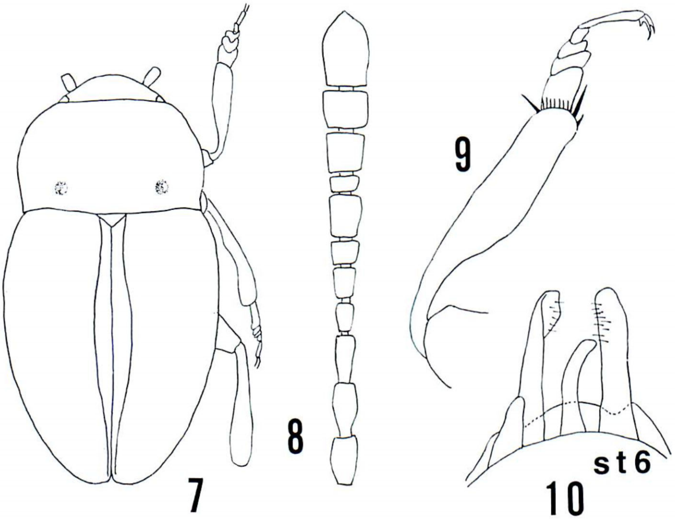
Pronotum three-fourths as long as wide, a little narrower (20 : 23) and much shorter than elytra (3 : 8), and widest a little behind middle; sides gently arcuate, from the widest point more strongly contracted in front than behind and feebly sinuate before rectangulate basal angles; apical margin shallowly emarginate, basal one feebly arcuate but somewhat emarginate near basal angles, all margins finely bordered except the basal emarginate parts; disc coarsely and rather closely granulate-punctate, and near base with a small fovea at each lateral one-fourth. Elytra two-thirds as wide as long, gently arcuate at sides and widest at basal two-fifths; transverse striations rather shallow, finely and closely punctate, interspaces among the striations rather narrow and flat, sutural striae fine, deep and entirely impressed from base to apex.

Mesosternum almost impunctate, finely and reticulo-linearly microsculptured, the microsculpture very weak on mesoepipleuron; metasternum with very coarse punctures, which are rather dense on median part but sparser on lateral parts. Abdominal sternites finely and somewhat sparsely punctate, the punctures becoming finer and denser distally on each sternite, and with obscurely reticulate microsculpture.

Legs thick and stout; protibiae (fig. 9) thickened internally, thin in basal one-third and almost parallel-sided in apical two-thirds; basal 3 segments of protarsi and 1st segment of mesotarsi not strongly dilated.

Penis (fig. 10) (I couldn't extract the male genitalia from the specimen being only one) thin in apical part and subacutely pointed; parameres weakly dilated at apex and a little ciliate at tip.

Female unknown.



Figs. 7-10. *Anemadiola itotateoi* sp. nov.
7. habitus; 8. male antenna; 9. male protibia; 10. apical part of male genitalia, in ventral view. st 6 : 6th sternite.

Holotype: ♂, Mt. Alishan, Chiai Hsien, 17. V. 1981, T. ITO leg. (in coll. T. SHIBATA).

The new species is easily distinguishable from *A. inordinata* SZYMCZAKOWSKI from Japan by the following points: in the new species the body smaller, the clypeo-frontal suture present but not impressed, the pronotum granulate-punctate, the elytral transverse striations shallow and finely punctate and the interspaces narrow and flat, the sutural striae fine, deep and entire, the parameres simple, while in *inordinata* the body larger (1.9-2.0 mm), the clypeo-frontal suture distinctly impressed, the pronotum only simply punctate, the elytral transverse striations deep and coarsely punctate, their interspaces rather wider and convex, the sutural striae wide, shallow and becoming obscure at base and apex, the parameres with a small hook at the apex.

Prionochaeta harmandi insulana Y. HAYASHI (Fig. 11)

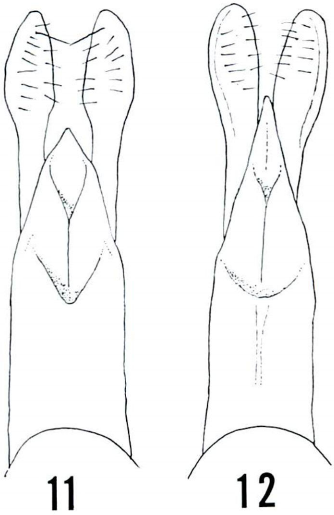
Prionochaeta harmandi ssp. *insulana* Y. HAYASHI, 1969, Ent. Rev. Japan, 22 (1) : 3, figs. 10-12.

Examined materials: 1 ♂, Nanshanchi, Taichung Hsien, 3. IV. 1970, T. KOBAYASHI leg.; 2♀♀, Fenchiifu, Chiai Hsien, 1 and 4. V. 1983, T. ITO leg.

Notes: It is difficult to distinguish subsp. *insulana* from subsp. *harmandi* by the relative length of each antennal segment, because the length of *P. harmandi* PORTEVIN is very variable as shown in the following table.

The male genitalia of this species is somewhat weakly chitinised and more or less deformed in dry state.

Of both the subspecies, *harmandi harmandi* and *harmandi insulana*, the punctures on head and elytra are delicately different in size and density, and the male genitalia are barely valid for clear distinction from each other. In subsp. *insulana* (fig. 11) the penis (in ventral view) is rather thick even near apex and abruptly convergent to acute tip, but in subsp. *harmandi* (fig. 12) it is rather thin and substraightly tapered from base to subacute tip.



Figs. 11,12. 11. *Prionochaeta harmandi insulana* Y. HAYASHI from Taiwan, apical part of male genitalia, in ventral view; 12. *P. harmandi harmandi* PORTEVIN from Nagano, Japan, ditto.

The table of relative length of male antennal segments
in some localities. (8th segment as 1)

Segment	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Localities											
Fujiidani (Nagano)	3.7	2.4	2.8	2.0	1.7	1.9	2.6	1	1.7	1.7	3.2
Sagami Oyama (Kanagawa)	3.7	1.8	2.3	2.0	1.7	1.7	2.2	1	1.7	1.5	3.0
Kibune (Kyoto)	3.4	2.1	2.7	2.0	1.5	1.7	2.3	1	1.4	1.4	3.0

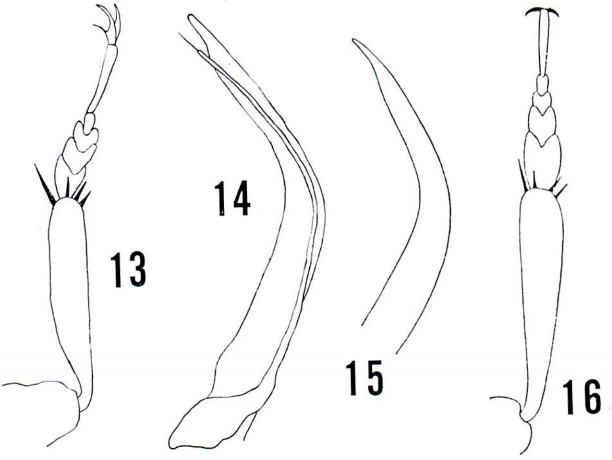
Kojin (Nara)	3.5	2.1	2.4	1.9	1.6	1.7	2.4	1	1.7	1.6	3.1
Amami Ohshima Is.	4.5	2.5	3.0	2.5	2.0	2.3	3.0	1	2.0	2.0	4.0
Taiwan	3.8	2.5	2.7	2.1	1.9	1.9	2.7	1	1.9	1.9	3.8

Mesocatops imitator (SCHWEIGER) (Figs. 13-16)

Catops imitator SCHWEIGER, 1956, Beitr. Ent., 6 : 536, fig. 3.
Catops imitator var. *robustus* SCHWEIGER, 1956, ditto : 538, fig. 3.
Mesocatops imitator : SZYMCZAKOWSKI, 1961, Acta zool. cracov., 6 : 132.
Mesocatops imitator : SZYMCZAKOWSKI, 1964, ditto, 9 (2) : 194-198, figs. 205-213.

Examined materials : 2♂♂, 1♀, Mt. Yangmingshan, Taipei Hsien, 6. V. 1983, T. ITO leg. ; 1♂, 1♀, Nanshanchi, Taichung Hsien, 3. IV. 1970, T. KOBAYASHI leg. ; 1♂, 3♀♀, Sungkang, Nantou Hsien, 21. VIII. 1969, Y. MAEDA and T. KOBAYASHI leg. ; 27 ♂♂, 24♀♀, Fenchiifu, Chiai Hsien, 27. III. 1970, T. KOBAYASHI leg., 19. VIII. 1969, T. KOBAYASHI and Y. MAEDA leg., 27. IV. 1973, Y. KIYOYAMA leg., 21. V. 1971, Y. MAEDA leg., 4. V. 1983, T. ITO leg. ; 1♂, Lanyu Is., 24. IV. 1971, Y. HAYASHI leg.

Taiwanese specimens almost agree with SCHWEIGER's original description and SZYMCZAKOWSKI's redescription in 1964 in the general appearance, the male genitalia, the ratio of each antennal segment and 5th abdominal sternite of the female, however, the male protibiae (fig. 13) are a little thicker even near the base than in SZYMCZAKOWSKI's figure (fig. 16).



Figs. 13-16. *Mesocatops imitator* (SCHWEIGER).
13, 14. from Fenchiifu ; 15, 16. cited from SZYMCZAKOWSKI, 1964.
13, 16. male protibia ; 14, 15. lateral view of male genitalia.

List of Catopidae from Taiwan

1. *Ptomaphaginus sauteri* (PORTEVIN)
   Distribution : Taiwan.

2. *Micronemadus pusillimus* (KRAATZ)
    Distribution: India, Malaysia (Malay Peninsula, Borneo), Indonesia (Sumatra, Java, Bali Is.), Philippine (Palawan Is.), Taiwan, China (Szechwan, Fukien), Japan.
3. *Anemadiola itotateoi* HAYASHI
    Distribution: Taiwan.
4. *Prionochaeta harmandi insulana* Y. HAYASHI
    Distribution: Taiwan, Japan (Amami Ohshima Is.).
5. *Mesocatops imitator* (SCHWEIGER)
    Distribution: Taiwan, China (Szechwan, Fukien).
6. *Catops continentalis* SCHWEIGER
    Distribution: Taiwan, China (Fukien).
7. *Catops taiwanensis* HAYASHI
    Distribution: Taiwan.
8. *Catops klapperichi* SCHWEIGER
    Distribution: Taiwan, China (Fukien).
9. *Catops miensis formosensis* HAYASHI
    Distribution: Taiwan.

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—— 1965; Zur Systematik und Verbreitung einiger Catopidae (Col.) der paläarktischen und orientalischen Region. Polsk. Pismo ent., Wroclaw, 35 (16): 522-533, 17 figs.

The Genus *Aplosonyx* CHEVROLAT from Peninsular Malaysia (Coleoptera, Chrysomelidae, Galerucinae)

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Abstract Leaf beetles of the genus *Aplosonyx* CHEVROLAT are represented in Peninsular Malaysia by seven species: *Aplosonyx albicornis* (WIEDEMANN), new record; *A. batuensis* (JACOBY), new record; *A. nigricollis* (DUVIVIER); *A. orientalis* (JACOBY), new record; *A. quadripustulatus* (BALY), new record; *A. robinsoni* (JACOBY); and *A. pahangi* MOHAMEDSAID, new species. A key to species and illustrations are provided.

Introduction

Presently, there are two species of leaf beetles of the genus *Aplosonyx* CHEVROLAT recorded from Peninsular Malaysia, out of 29 species known from the Malay Archipelago region. This paper reports the occurrence of another five species, four of which are new records and one is new to science. Identification of the species were aided by the original descriptions and determined species in the collection of Prof. S. KIMOTO, Kurume University, Japan.

Abbreviations

Materials for this study are from the institutions abbreviated and listed below:

DOA	Department of Agriculture, Kuala Lumpur, Malaysia.
KIMOTO	S. KIMOTO collection, Kurume, Japan.
UKM	Universiti Kebangsaan Malaysia, Bangi.
UM	Universiti Malaya, Kuala Lumpur.

Systematics

The genus *Aplosonyx* CHEVROLAT can be distinguished from other genera of galerucine beetles in Peninsular Malaysia by the following combination of characters. Also, KIMOTO (1989) has provided key to genera of Galerucinae from the Indochinese region.

Antennal segments 2 & 3 short, subequal. Eyes prominent. Anterior coxal cavity close posteriorly. Pronotum with transverse furrow deep, the basal margin not marginate, except near side, the posterior corner distinctly angulated. Hind

〔Ent. Rev. Japan, Vol. XLV, No. 1, pp. 37-42, June, 1990〕

tarsi with the first segment shorter than or subequal to reminder combined. Tarsal claws appendiculate.

Key to the Peninsular Malaysia species of *Aplosonyx*

1. Dorsal surfaces entirely brownish ········· 2
— Dorsal surfaces partly or largely bluish, violaceous or blackish ········· 3
2. Legs with tibiae and tarsi black; yellowish brown with meso- and metathorax largely pitchy black, in pale coloured specimen ventral surfaces entirely yellowish brown; antennae pitchy black with first segment brownish. Length 9-10 mm········· *orientalis* (JACOBY)
— Legs entirely blackish; yellowish brown with ventral surfaces of meso- and metathorax and abdomen pitchy black; antennae yellowish brown with apical segment blackish. Length 14-15 mm ········· *robinsoni* (JACOBY)
3. Pronotum entirely black········· 4
— Pronotum yellow, with black spot in middle. Elytra blue-black with four yellow spots. Ventral surfaces yellow, except for the mesosternum black········· *quadripustulatus* (BALY)
4. Elytra entirely metallic blue ········· 5
— Elytra with other combination ········· 6
5. Head with vertex punctated. Pronotum with smaller punctures than on elytra. Elytral surface not rugose, with moderately large punctures. Aedeagus (Figs. 1, 6) moderately curved, with apical part pointed. Larger species, length 13.5-15.5 mm ········· *albicornis* (WIEDEMANN)
— Head with vertex almost impunctate. Pronotum with large punctures, as large as on elytra. Elytral surface rather rugose, with large and deep punctures. Aedeagus (Figs. 5, 10) strongly curved, with apical part not pointed. Smaller species, length 6.5 mm········· *pahangi* MOHAMEDSAID, n. sp.
6. Elytra with basal half blue, rest brown; surface rather rugose, with large punctures. Ventral surfaces black, except abdomen yellowish········· *batuensis* (JACOBY)
— Elytra largely brown, with apical fifth black; surface rather smooth, with small punctures. Ventral surfaces black or brownish black········· *nigricollis* (DUVIVIER)

1. *Aplosonyx albicornis* (WIEDEMANN) (Figs. 1, 6)

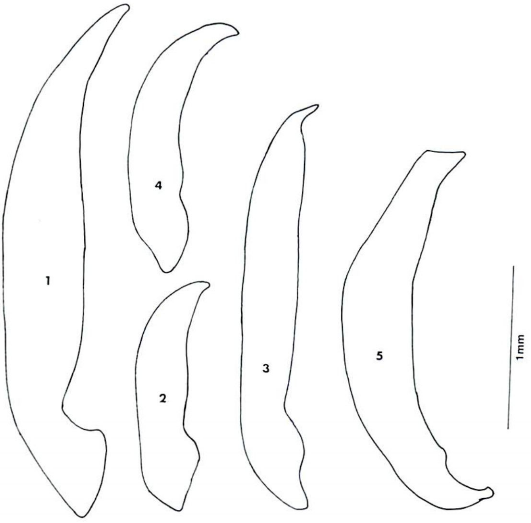
Haplosonyx albicornis WIEDEMANN, 1821, in GERMAR, Mag. Ent., 4 : 175 (Java).
Aplosonyx albicornis var. *insularis* LABOISSIÈRE, 1929, Bull. Raffles Mus., 2 : 93 (Mentawei Is.).

Records: SELANGOR: Ulu Langat, 22. ii. 1981, DZULKHIJAH, UKM, 1. PERAK: Larut Hills, 3,700 ft, 16-17. ii. 1932, H. M. PENDLEBURY, UKM, 3. Taiping, Maxwell Hills, 28. viii. 1954, C. J. WYATT, DOA, 1.

Remarks: This is a new record for Peninsular Malaysia.

2. *Aplosonyx batuensis* (JACOBY) (Figs. 2, 7)

Haplosonyx batuensis JACOBY, 1897, Ann. Mus. Civ. Genova, 38 : 411 (Batu Is.); 1899, Stett. Ent. Ztg., 60 : 302, pl. 1, fig. 13 (Sumatra); 1905, Fascic. Malay. 2, app., 6 (notes).



Figs. 1-5. Aedeagi of *Aplosonyx* species (lateral view).
1. *A. albicornis* ; 2. *A. batuensis* ; 3. *A. orientalis* ;
4. *A. quadripustulatus* ; 5. *A. pahangi* n. sp.

Records: SELANGOR: Taman Templer, 20. iii. 1989, Ismail, Ruslan & Nor, UKM, 1. NEGERI SEMBILAN: Pusat Pertanian Chembong, Ismail & Nor, UKM, 1. PAHANG: Ekspedisi Rompin-Endau, Ismail & Nor, UKM, 5.

Remarks: This is a new record for Peninsular Malaysia. Two specimens, each collected from Selangor and Negeri Sembilan, were found different from the typical form, where their antennae, tibiae and tarsi largely yellowish. Jacoby (1905) observed two specimens from Borneo with this characteristics, and correctly placed this form under *batuensis*. I have the opportunity to dissect the male genitalia from both forms, and found that there is no structural difference.

3. *Aplosonyx nigricollis* (Duvivier)

Haplosonyx nigricollis Duvivier, 1858, Stett. Ent. Z., 46 : 244 (Nias, Malacca).

Aplosonyx nigricollis : Laboissière, 1940, Bull. Mus. Hist. Nat. Belg., 16 (3) : 22 (Nias).

Records: SELANGOR: Hutan Lipur Kancing, 15. vi. 1987, Salleh & Ismail, UKM, 1 ; Ulu Langat, 23. vii. 1975, L. A. L., UM, 1. MELAKA: Air Keroh, 11. iv. 1988, Salleh & Ismail, UKM, 1.

Remarks: A specimen collected from Ulu Langat (Selangor) possesses the antennae entirely black, except the two apical segments brownish.

4. *Aplosonyx orientalis* (JACOBY) (Figs. 3, 8)

Haplosonyx orientalis JACOBY, 1892, Ann. Mus. Civ. Genova, 32 : 962 (Burma).

Haplosonyx varipes JACOBY, 1892, Ann. Mus. Civ. Genova, 32 : 964 (Burma). — KIMOTO, 1989, Esakia, 27 : 171 (= *orientalis*).

Records: SELANGOR: Bangi, Universiti Kebangsaan, 9. iii. 1986, ISMAIL & NOR, UKM, 1; 11. iii. 1989, MOHD HASHIM, UKM, 1; 11. iii. 1989, AMINAH, UKM, 1; 14. iii. 1989, JINS JOHAN, UKM, 1. Hutan Lipur Kancing, 5. iii. 1987, HISHAMUDIN, UKM, 1. Kelang Gate, 7. xii. 1975, RAZALI, UKM, 2. Kuala Sleh, 26. i. 1947, R. A. LEVER, DOA, 1. Petaling Jaya, 4. vii. 1976, ABIDIN, UKM, 1; 24. ii. 1979, TUMINA AKHIAT, UKM, 1; 15. i. 1980, NAIMAH OMAR, UKM, 1. Puchong, 7. ix. 1974, B. & D. KURTAK, UKM, 1. Shah Alam, Bukit Cerakah, 18. ii. 1989, ISMAIL & NOR, UKM, 1. Taman Templer, 8. ix. 1974, ABG. ABD. HAMID, UKM, 1; 17. i. 1980, HASSAN, UKM, 1. Ulu Klang, 30 i. 1983, MUJIRAH SIKIN, UKM, 1. KUALA LUMPUR: Cheras, 25. xii. 1978, ASHIKIN, UKM, 1. Sungai Besi, 20. ii. 1981, YAHAYA SELAMAT, UKM, 1. KEDAH: Bedong, 28. i. 1980, KALSOM OSMAN, UKM, 1. KELANTAN: Pasir Mas, 19. ii. 1985, MOHD NOR SEMAN, UKM, 1. Rantau Panjang, 22. i. 1982, SAMSUDDIN, UKM, 1. PAHANG: Bukit Fraser, 18. ii. 1989, AZHAR, UKM, 1. Maran, 10. ii. 1989, AMIR, UKM, 1.

Remarks: This is a new record for Peninsular Malaysia.

5. *Aplosonyx quadripustulatus* (BALY) (Figs. 4, 9)

Caritheca quadripustulata BALY, 1877, Ent. Monthly Mag., 13 : 226 (Sumatra).

Aplosonyx quadripustulatus: KIMOTO, 1989, Esakia, 27 : 173.

Records: SELANGOR: Bangi, Universiti Kebangsaan, 10. ix. 1974, ZAIDI MD. ISA, UKM, 2 ; 18. iii. 1989, AMINAH, UKM, 1. Banting, 2. x. 1989, ISMAIL & NOR, UKM, 1. Bukit Lanjan, 17. i. 1976, RAZALI, UKM, 1 ; 17. i 1976, YUSUF, UKM, 1 ; 1. vii. 1988, ISMAIL, RUSLAN, NOR, UKM, 1. Gombak, Baru 16, 13. viii. 1987, SALLEH, ISMAIL, UKM, 1. Ulu Langat, Ponsun, 7. i. 1974, D. & B. KURTAK, UKM, 1. PERAK: Bukit Larut, 9. ix. 1986, SALLEH & ISMAIL, UKM, 2. NEGERI SEMBILAN: Pusat Pertanian Chembong, ISMAIL & NOR, UKM, 1.

Remarks: This is a new record for Peninsular Malaysia.

6. *Aplosonyx robinsoni* (JACOBY)

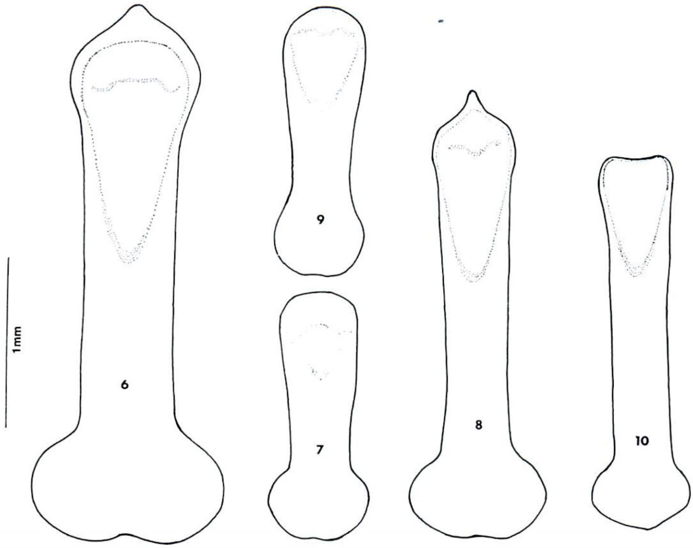
Haplosonyx robinsoni JACOBY, 1905, Fascic. Malay. 2, app., 6 (Siamese Malay: Bukit Besar, Nawangchik and Tor).

Aplosonyx robinsoni: MAULIK, 1936, Fauna India, Galeruc.: 618 (Burma, Thailand, Perak, Sumatra).

Records: SELANGOR: Bukit Takun, Taman Templer, 23. viii. 1974, UKM, 1. Serdang, Ulu Langat, 12. i. 1947, DOA, 1. PERAK: 19 miles from Tapah, 3. iv. 1976, Y. MIYAKE, KIMOTO, 7; UKM, 1.

7. *Aplosonyx pahangi* MOHAMEDSAID, n. sp. (Figs. 5, 10)

Black. Elytra metallic blue. Antennae yellowish. Length 6.5 mm, width 3.5 mm.



Figs. 6-10. Aedeagi of *Aplosonyx* species (ventral view).
6. *A. albicornis* ; 7. *A. batuensis* ; 8. *A. orientalis* ;
9. *A. quadripustulatus* ; 10. *A. pahangi* n. sp.

Head with vertex smooth, shiny, nearly impunctate ; frontal tubercles subquadrate, distinctly raised, surface smooth, shiny ; frontoclypeus convex, triangular, with apical margin distinctly raised ; labrum sparsely covered with long pubescences, apical margin truncated ; maxillary palpi with preapical segments strongly incrassate, pubescent. Eyes prominent, the distance between eyes 1.5 × as broad as the diameter of the eye ; sides behind oblique then subparalell forming the neck. Antennae slender, long, nearly three-fourths as long as body length ; segment 1 long, club-shaped ; 2 and 3 short, the latter one-half as long as the former ; 4 longest, nearly 1.5 × as long as 5 ; 5, 6 subequal ; 7, 8 subequal, shorter than 6 ; 9, 10 subequal, shorter than 8 ; 11 subequal 10 in length but narrower. Pronotum narrowly transverse, 2.3 × as broad as long, subparallel ; disc transversely grooved, shiny, moderately densely covered with small punctures. Scutellum black, triangular, impunctate, shiny. Elytra 1.5 × as long as broad, convex, subparallel, evenly rounded apically ; sides with a deep longitudinal depression within the shoulders, the latter prominent ; surface densely covered with moderately large punctures, and with traces of longitudinal smooth costae. Ventral surfaces blackish, moderately densely covered with short golden pubsecences. Legs largely black. Aedeagus (Fig. 5) strongly curved, with apical part flattened, not pointed, the basal part moderately explanate. Male apical sternite, with median lobe shallowed.

Holotype, Male, Malaysia, Pahang, Genting Highlands, 9. ii. 1986, HISHAMUDIN.

The type will be deposited in the Department of Zoology, Universiti Kebangsaan Malaysia, Bangi (UKM).

Acknowledegments

The support of IRPA Project No. 4-07-03-07, which enabled the author to study chrysomelid beetles in the collection of Prof. S. KIMOTO, Kurume University, Japan, is gratefully acknowledged. I thank Dr. KHOO Soo GHEE, Universiti Malaya (UM) for loan of specimens, and Prof. KIMOTO for his permission to work in his laboratory and reading the manuscript.

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Coprophagid-beetles from Northwest Thailand (V)

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Abstract The present part deals with following new species: *Onthophagus* (s. str.) *maleengnoi* sp. nov., *O.* (s. str.) *naaroon* sp. nov., *O.* (s. str.) *maleengnaafon* sp. nov., *O.* (s. str.) *tholaayi* sp. nov., *O.* (s. str.) *khonmiinitnoi* sp. nov., *O.* (s. str.) *phraoensis* sp. nov., and *O.* (s. str.) *lakyim* sp. nov.

Onthophagus (s. str.) *maleengnoi* sp. nov.

(Fig. 1)

Brownish black, with outer margin of head, mouth parts, antennae, humeral and apical portions of elytra, prothorax, legs, etc., lighter in colour; each surface rather strongly, feebly vitreously shining and almost glabrous. Fairly distinctly ovate and thickened.

Male: Head rather transverse elliptic, feebly micro-shagreened and rather unevenly punctate, gently convex in middle with a blunt, transverse tubercle on fronto-clypeal border; frons broadly, shallowly depressed in V-shape; clypeus feebly denticulately bilobed in front; genae weakly, roundly produced laterad.

Pronotum gently convex above, feebly micro-shagreened and rather coarsely, shallowly punctate; sides gently arcuate, roundly narrowed towards apex; base widely produced posteriad; front angles subrectangular; hind angles rounded.

Elytra shallowly grooved, each groove with a fine stria, each side of stria with rows of punctures, thus the punctures appear to be extremely transverse accross the stria under low magnification; intervals gently convex and slightly wrinkled, scattered with microscopic punctures.

Pygidium gently convex, shallowly punctate, with base marginate. Metasternum without angular process in front, punctate, the punctures fine in middle, becoming coarser and larger in lateral portions.

〔Ent. Rev. Japan, Vol. XLV, No. 1, pp. 43-51, June, 1990〕

Protibia rather slender and curved though rather distinctly thickened in apical portion, with four distinct outer teeth, terminal spur pointed, gently curved downwards; ratio of the length of metatarsomeres and terminal spur of metatibia: 1.0, 0.38, 0.27, 0.21, 0.32; 0.8.

Female: Head rugosely punctate; fronto-clypeal border finely ridged; frons shallowly depressed; protibia shorter but more thickened towards apex than in male.

Body length: 3.7-4.3 mm.

Holotype: ♂, Doi Suthep/Pui, Chiang Mai Prov., Northwest Thailand, 30. VII. - 5. VIII. 1988, K. MASUMOTO leg. Paratypes: 11 exs., same data as the holotype; 9 exs., Doi Inthanon, Chiang Mai Prov., 30. VII. - 3. VIII. 1988, K. MASUMOTO leg.; 3 exs., same locality, 15. IX. 1988, K. MASUMOTO leg.

Notes. This new species somewhat resembles *Onthophagus* (s. str.) *rana* ARROW, 1931, from South India, but can be distinguished from the latter by the body smaller, the head with a V-shaped depression behind the middle instead of with a tubercle, the pronotum without declivities in front, and the elytra shallowly grooved.

Onthophagus (s. str.) *naaroon* sp. nov.

(Fig. 2)

Reddish brown and partly darker, with dorsal surface bearing coppery lustre, head beneath, antennae, etc., yellowish. Body ovate and thickened.

Male: Head subrhombic, finely punctate, feebly raised in middle; clypeus feebly denticulately bilobed in front, with outer margin weakly reflexed, separated from frons by a fine ridge, which is slightly arcuate; genae obtusely produced laterad; interocular space armed with a pair of solid conical horns, which are connected with each other on the vertex, thus a semicircular depression forms between the horns.

Pronotum finely punctate; sides gently rounded in dorsal view; base widely arcuate posteriad; front angles subrectangular with rounded corners; hind angles rounded.

Elytra shallowly punctato-striate, the punctures in striae notching intervals; intervals feebly convex, scattered with fine punctures, which are smaller than those on pronotum.

Pygidium convex in middle, scattered with punctures, which are larger but shallower than those on pronotum, with base marginate. Metasternum rather closely punctate, each puncture with a bent hair.

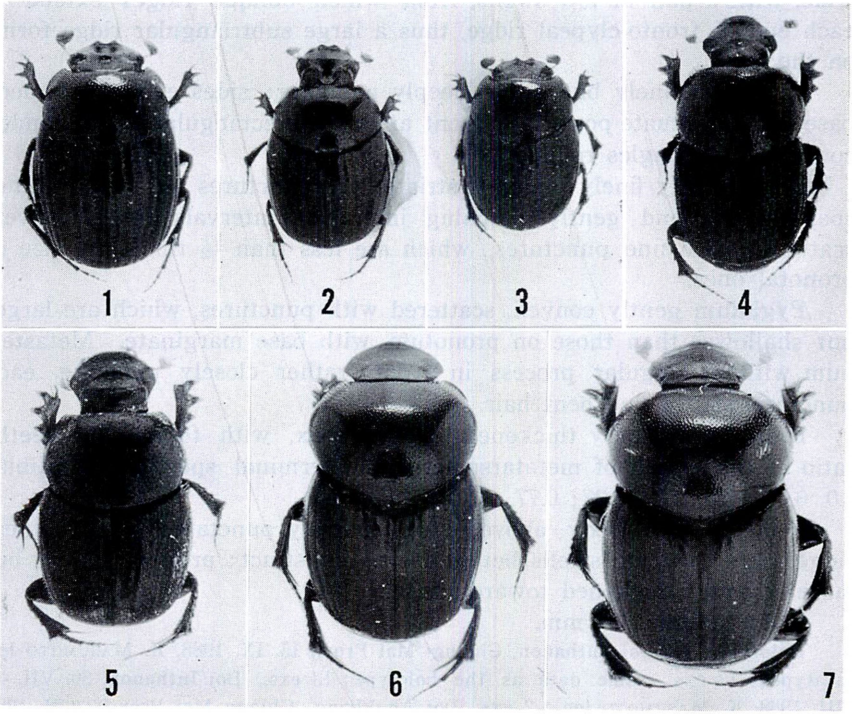
Protibia with four outer teeth but the basal is inconspicuous in male; ratio of the length of metatarsomeres and terminal spur of metatibia: 1.0, 0.39, 0.3, 0.25, 0.3; 0.77.

Female: Head more closely and rather rugosely punctate; fronto-clypeal ridge more distinct; interocular space feebly swollen on each side, the swells connected with each other on vertex; protibia more distinctly thickened towards apex, with more conspicuous outer teeth.

Body length: 3.6-3.8 mm.

Holotype: ♂, Doi Suthep, Chiang Mai Prov., Northwest Thailand, 9. II. 1989, K. Masumoto leg. Paratypes: 308 exs., Doi Suthep, 6-9. II. 1989, K. Masumoto leg.; 1 ex., Doi Pui, Chiang Mai Prov., 2. II. 1989, Manit Y. leg.; 2 exs., Doi Pui, 11. II. 1989, Manit Y. leg.; 190 exs., Doi Suthep, 15. III. 1989, Manit Y. leg.; 57 exs., Doi Suthep, 24-30. XII. 1989, Manit Y. leg.

Notes. No species allied to this is named from the Oriental and Palearctic Regions. It is worthy to note that the species inhabits in deep forests in the dry season.



Figs. 1-7. 1. *Onthophagus* (s. str.) *maleengnoi* sp. nov., ♂, holotype; 2. *O.* (s. str.) *naaroon* sp. nov., ♂, holotype; 3. *O.* (s. str.) *maleengnaafon* sp. nov., ♂, holotype; 4. *O.* (s. str.) *tholaayi* sp. nov., ♂, holotype; 5. *O.* (s. str.) *khonmiinitnoi* sp. nov., ♂, holotype; 6. *O.* (s. str.) *phraoensis* sp. nov., ♂, holotype; 7. *O.* (s. str.) *lakyim* sp. nov., ♂, holotype. (M. Kiuchi photo.)

Onthophagus (s. str.) *maleengnaafon* sp. nov.

(Fig. 3)

Brownish black, with outer margin of head, antennae, legs, and often elytra lighter in colour; each surface strongly, rather vitreously shining. Ovate and thickened.

Male: Head somewhat transverse elliptic, rather closely punctate; clypeus wide, reflexed along outer margin, with a pair of denticulate lobes in front; frons separated from clypeus by a low ridge, which is arcuate forwards; genae obtusely produced laterad; interocular space wide, with a pair of low swells, from which oblique ridges extend to each end of fronto-clypeal ridge, thus a large subtriangular ridge forms on the head.

Pronotum finely but rather deeply punctate; sides evenly rounded; base widely arcuate posteriad; front angles subrectangular with rounded corners; hind angles rounded.

Elytra fairly finely punctato-striate, the punctures in striae rather sparsely set and gently notching intervals; intervals feebly convex, scattered with fine punctures, which are less than ½ times the size of pronotal ones.

Pygidium gently convex, scattered with punctures, which are larger but shallower than those on pronotum, with base marginate. Metasternum without angular process in front, rather closely punctate, each puncture with a fine bent hair.

Protibia gradually thickened towards apex, with four outer teeth; ratio of the length of metatarsomeres and terminal spur of metatibia: 1.0, 0.46, 0.33, 0.22, 0.37; 0.77.

Female: Fore body above more coarsely punctate; fronto-clypeal ridge more distinct; swells between eyes indistinct; protibia shorter but more strongly thickened towards apex.

Body length: 3–4 mm.

Holotype: ♂, Doi Inthanon, Chiang Mai Prov., 15. IX. 1988, K. MASUMOTO leg. Paratypes: 13 exs., same data as the holotype; 13 exs., Doi Inthanon, 30. VII. - 5. VIII. 1988, K. MASUMOTO leg.; 2 exs., Doi Angkhang, Chiang Mai Prov., 23. V. 1989, K. MASUMOTO leg.; 2 exs., Doi Pui, Chiang Mai Prov., 27. IX. 1987, MANIT Y. leg.; 1 ex., Doi Pui, 23. X. 1987, MANIT Y. leg.; 1 ex., Doi Inthanon, 9. VII. 1988, MANIT Y. leg.; 2 exs., Doi Inthanon, 1. X. 1988, MANIT Y. leg.; 2 exs., Doi Inthanon, 8. VII. 1989, MANIT Y. leg.

This new species somewhat resembles *Onthophagus* (s. str.) *maleengnoi* MASUMOTO, from Northwest Thailand, but can be distinguished from the latter by the body above more shining, the differently shaped head, the pronotum finely punctate, and the elytra finely punctato-striate.

Onthophagus (s. str.) *tholaayi* sp. nov.

(Fig. 4)

Dark reddish brown, with dorsal surface brownish black, antennae, mouth parts, tarsi, etc., paler in colour; each surface moderately shining and feebly micro-shagreened. Oblong oval, moderately convex above but gently flattened posteriorly, weakly constricted between pronotum and elytra.

Male: Head subrhombic, gently elevated posteriorly, rather closely, finely punctate; clypeus produced and reflexed in front, with fronto-clypeal border feebly ridged and arcuate forwards; genae obtuse; vertex with a lamina, which is arcuate forwards at the base and pointed at the top in dorsal view, trapezoidal basally and subparabolic apically in frontal view.

Pronotum rather closely punctate; apical margin steeply inclined; sides rounded and rather conspicuously haired, gently sinuous near base, with outer margin feebly serrate in apical half; base widely arcuate posteriad; front angles rectangular with rounded corners.

Elytra shallowly punctato-striate, the punctures in striae gently notching intervals; intervals feebly convex, rather distinctly micro-shagreened and finely haired, each interval with two rows of fine punctures.

Pygidium moderately convex, micro-shagreened and rather irregularly, finely punctate, without basal margination. Metasternum rather smooth, sparsely punctate, the punctures in middle small, those in lateral portions becoming larger and coarser.

Protibia rather stout, quadridentate, with terminal spur rather bold; ratio of the length of metatarsomeres and terminal spur of metatibia: 1.0, 0.37, 0.28, 0.22, 0.45; 0.94.

Female: Body a little shortened; fore body above more closely punctate; head less distinctly produced in front, with posterior portion more distinctly elevated instead of with a lamina like in male.

Body length: 4.7-6.2 mm.

Holotype: ♂, Maesa Vil., Chiang Mai Prov., Northwest Thailand, 26. VII.- 1. VIII. 1987, K. Masumoto leg. Paratypes: 13 exs., same data as the holotype; 1 ex., Maesa Vil., 13-14. VI. 1987, Manit Y. leg.; 2 exs., Maesa Vil., 4. VII. 1987, Manit Y. leg.; 16 exs., Maesa Vil., 13 30. VIII. 1987, Manit Y. leg.; 11 exs., Maesa Vil., 9-11. X. 1987, Manit Y. leg.; 13 exs., Maesa Vil., 25. XI. 1987, Manit Y. leg.; 18 exs., Maesa Vil., 16. V. 1988, Manit Y. leg.; 26 exs., Maesa Vil., 6. VIII. 1988, Manit Y. leg.; 1 ex., Maesa Vil., 29. IV. 1985, K. Masumoto leg.; 2 exs., Maesa Vil., 22. VII. 1986, K. Masumoto leg.; 1 ex., Maesa Vil., 31. VII. 1987, K. Masumoto leg.; 2 exs., Maesa Vil., 14. IX. 1988, Masumoto leg.; 6 exs., Chiang Dao, 23. VII. 1986,

K. MASUMOTO leg.; 2 exs., Phrao, Chiang Mai Prov., 5. IX. 1988, MANIT Y. leg.; 2 exs., Phrao-Chiang Dao, 9. X. 1988, MANIT Y. leg.

Notes. This new species somewhat resembles *Onthophagus* (s. str.) *hastifer* LANSBERGE, 1885, broadly distributed in Southeast Asia, but can be easily discriminated from the latter by the dorsal surface less coarsely punctate and haired, and the differently shaped head in both sexes.

This species occurs on the sunny and sandy soil.

Onthophagus (s. str.) *khonmiinitnoi* sp. nov.

(Fig. 5)

Brownish black, with apical portions of head and elytra, legs, abdomen, etc., rather reddish brown, antennae and mouth parts much lighter in colour, head and lateral portions of pronotum bearing feeble coppery lustre; head fairly strongly shining, pronotum and elytra gently shining, feebly micro-shagreened; ventral surface fairly strongly, somewhat vitreously shining; dorsal surface rather conspicuously, finely haired. Oblong oval and moderately convex above, though gently flattened posteriorly, moderately constricted between pronotum and elytra.

Male: Head rather transverse elliptic, gently raised towards vertex, feebly rugoso-punctate, the punctures uneven in size; clypeus gently reflexed along outer margin, with fronto-clypeal border arcuate and ridged; genae obtuse; interocular space with a transverse ridge.

Pronotum scattered with round punctures; sides moderately arcuate laterad, feebly sinuous before base; apical margin gradually inclined, widely, slightly sinuous on each side; base widely produced posteriad; front angles subrectangular and not produced forwards, with rounded corners; hind angles inconspicuous.

Elytra shallowly punctato-striate, the punctures in striae feebly notching intervals; intervals slightly elevated, scattered with fine punctures in rows.

Pygidium gently convex, rather closely, finely punctate, each puncture with a fine hair, with base not marginate. Metasternum smooth, scattered with microscopic punctures and finely haired in lateral portions.

Protibia fairly stout, with four strong outer teeth, of which the basal is connected with the posterior serration; ratio of the length of metatarsomeres and terminal spur of metatibia: 1.0, 0.42, 0.32, 0.28, 0.44; 0.92.

Female: Fore body above more closely punctate; interocular space raised instead of transversely ridged; pronotum with front angles a little produced forwards.

Body length: 5.3–6.5 mm.

Holotype: ♂, Doi Inthanon, Chiang Mai Prov., Northwest Thailand, 1. V. 1985, K. MASUMOTO leg. Paratypes: 2 exs., same data as the holotype; 17 exs., Doi Inthanon, 3. V. 1985, K. MASUMOTO leg.; 1 ex., Maesa Vil., Chiang Mai Prov., 22. VII. 1986, K. MASUMOTO leg.; 1 ex., Phrao, Chiang Mai Prov., 25. VII. 1986, 2 exs., same locality, 26. VII. - 1. VIII. 1987, K. MASUMOTO leg.; 4 exs., Chiang Dao, Chiang Mai Prov., 27-31. VII. 1987, K. MASUMOTO leg.; 1 ex., Doi Pui/Suthep, 30. VII. - 5. VIII. 1988, K. MASUMOTO leg.; 1 ex., Chiang Dao, 11. IX. 1988, K. MASUMOTO leg.; 2 exs., Chiang Dao, 22. XI. 1988, K. MASUMOTO leg.; 1 ex., Doi Saket, Chiang Mai Prov., 8. X. 1989, K. MASUMOTO leg.; 1 ex., Phrao, 29. IX. 1986, MANIT Y. leg.; 2 exs., Phrao, 1-10. VI. 1987, MANIT Y. leg.; 1 ex., Phrao, 10. VIII. 1987, MANIT Y. leg.; 4 exs., Phrao, 15. VIII. 1987, MANIT Y. leg.; 4 exs., Phrao, 18-20. X. 1987, MANIT Y. leg.; 2 exs., Phrao, 30. XI. 1987, MANIT Y. leg.; 1 ex., Phrao, 15. VI. 1988, MANIT Y. leg.; 5 exs., Maesa Vil., 6. VIII. 1988, MANIT Y. leg.

Notes. This new species also resembles *Onthophagus* (s. str.) *hastifer* LANSBERGE, 1885, in general characters, but can be easily distinguished from the latter by the dorsal surface less closely punctate, the differently shaped cephalic ridges or horns in both sexes, the less produced pronotal front angles in male, and the head with the rounded apical margin in female.

Onthophagus (s. str.) *phraoensis* sp. nov.

(Fig. 6)

Dark reddish brown to blackish brown, with antennae, mouth parts, hairs on surfaces, etc., yellowish brown; each surface fairly strongly shining, microscopically haired on elytra, conspicuously haired in lateral portions of ventral surface and legs. Body oblong ovate, strongly convex above but gently flattened posteriorly, moderately constricted between pronotum and elytra.

Male: Head arcuate forwards, feebly raised in middle, reflexed along outer margin, closely punctate, clypeus rugose anteriorly, briefly truncate and rather noticeably reflexed in front; genae obtusely angulate; vertex feebly raised towards posterior margin.

Pronotum very feebly micro-shagreened, almost glabrous, rather closely, finely punctate; apical margin widely emarginate; base extremely widely V-shaped with each side gently rounded, apex of the V-shape bluntly pointed; sides roundly produced laterad, weakly sinuous before base; front angles subrectangular with rounded corners; hind angles indistinct; disc with a shallow median groove in posterior half.

Elytra finely punctato-striate, the punctures in striae rather sparsely set and feebly notching intervals; intervals gently convex, feebly micro-shagreened but not rasp-like, scattered with microscopic punctures, each with a fine hair.

Pygidium moderately convex, feebly micro-shagreened, rather closely, irregularly punctate, margined along base. Metasternum with angular process, rather closely scattered with punctures, each with a fine, bent hair.

Protibia rather stout, with four outer teeth; ratio of the length of metatarsomeres and terminal spur of metatibia: 1.0, 0.37, 0.28, 0.21, 0.25; 1.02.

Female: Fore body above more closely punctate; head less produced forwards; clypeus more rugose; protibiae stouter.

Body length: 6–8 mm.

Holotype: ♂, Phrao, Chiang Mai Prov., Northwest Thailand, 10. VIII. 1987, Manit Y. leg. Paratypes: 13 exs., same data as the holotype; 1 ex., Doi Suthep, Chiang Mai Prov., 29. V. 1983, Y. Komiya leg.; 1 ex., Doi Suthep, 31. V. 1983, H. Akiyama leg.; 1 ex., Maesa Vil., 26. VII. – 1. VIII. 1987, K. Masumoto leg.; 1 ex., Doi Suthep/Pui, 30. VII. – 5. VIII. 1988, K. Masumoto leg.; 4 exs., Phrao–Chiang Dao, 14–16. IX. 1988, K. Masumoto leg.; 1 ex., Doi Suthep, 16. IX. 1988, K. Masumoto leg.; 2 exs., Maesa Vil., 30. VIII. 1987, Manit Y. leg.; 1 ex., Maesa Vil., 10–20. IX. 1987, Manit Y. leg.; 1 ex., Doi Pui, 17. VI. 1989, Manit Y. leg.; 2 exs., Doi Suthep, 15. VIII. 1989, Mamit Y. leg.; 2 exs., Doi Suthep/Pui, 5. XII. 1989, 1 ex., 24. XII. 1989, Manit Y. leg.

Notes. This new species resembles *Onthophagus* (s. str.) *funebris* Boucomont, 1919, originally described from 'Haut-Mekong', though it has been recorded from North Vietnam and also from Yunnan, but can be distinguished from the latter by the fore body above glabrous and more finely punctate, the elytral intervals not asperate but finely punctate, and the male clypeus briefly truncate at apex.

The specimens are mostly captured at carrion bait trap.

Onthophagus (s. str.) *lakyim* sp. nov.

(Fig. 7)

Brownish black, with apical margin of head, legs, etc., dark reddish brown, antennae, mouth parts and hairs on surfaces yellowish brown; dorsal surface fairly strongly, feebly sericeously shining, pronotum and head gently clothed with microscopic hairs, ventral surface moderately shining and rather conspicuously clothed with hairs, which become denser and longer towards lateral portions. Body oblong ovate, strongly convex but gently flattened posteriorly, constricted between pronotum and elytra.

Male: Head somewhat transverse elliptic, very feebly convex in middle, closely punctate; clypeus rugoso-punctate, arcuate forwards and gently reflexed, slightly produced and very briefly truncate in front; genae obtusely angulate; vertex with a transverse crescent ridge along hind margin.

Pronotum fairly closely, evenly punctate; apical margin straight widely in middle, oblique on each side; base widely V-shaped, with apex of the V-shape feebly pointed; sides rather distinctly swollen, with outer margins arcuate laterad and fairly distinctly sinuous before base; front angles subrectangular with corners obtuse; hind angles indistinct; anterior declivity with a very faint, oblong impression in the middle.

Elytra finely punctato-striate, the punctures in striae sparsely set and slightly notching intervals; intervals fairly broad, very feebly elevated, micro-shagreened and scattered with microscopic punctures, each with a fine hair.

Pygidium gently convex, closely, finely punctate and microscopically haired, with base marginate. Metasterum with an angular process, fairly closely punctate and haired.

Protibia stout, with four outer teeth; ratio of the length of metatarsomeres and terminal spur of metatibia: 1.0, 0.33, 0.22, 0.19, 0.3; 1.02.

Female: Fore body above more closely punctate; head more distinctly rugoso-punctate, with ridge on vertex more strongly arcuate forwards; protibiae stouter.

Body length: 5.7–7.8 mm.

Holotype: ♂, Maesa Vil., Chiang Mai Prov., Northwest Thailand, 26. VII - 1. VIII. 1987, K. MASUMOTO leg. Paratypes: 7 exs., same data as the holotype; 5 exs., Chiang Dao, 27–31. VII. 1987, K. MASUMOTO leg.; 2 exs., Phrao-Chiang Dao, 14–16. IX. 1988, K. MASUMOTO leg.; 1 ex., Phrao, 10. VIII. 1987, MANIT Y. leg.; 5 exs., Maesa Vil., 30. VIII. 1987, MANIT Y. leg.; 1 ex., Phrao-Chiang Dao, 9. X. 1988, MANIT Y. leg.

Notes. This new species also resembles *Onthophagus* (s. str.) *funebris* BOUCOMONT, 1919, but can be separated from it by each surface less distinctly haired, the fore body above more finely punctate, the vertex more conspicuously ridged in crescent-shape, and the front declivity of pronotum faintly impressed in the middle.

The present species is also captured at carrion trap.

国際動物命名委員会からのお願い (12)

The following applications were published on September 29, 1989 in Vol. 46, Part 3 of the Bulletin of Zoological Nomenclature. Comment or advice on these applications is invited for publication in the Bulletin and should be sent to the Executive Secretary, I. C. Z. N., c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, U. K.

Case No.

2672 *Castiarina* GORY et LAPORTÉ, 1837 (Coleoptera): proposed conservation.

2690 *Helophorus brevipalpis* BEDEL, 1881 (Coleoptera): proposed precedence over *Helophorus creticus* KIESENWETTER, 1858.

2689 *Helophorus obscurellus* POPPIUS, 1907 (Coleoptera): proposed precedence over *Helophorus fausti* KUWERT, 1887.

2716 *Ceratopogon puncticollis* BECKER, 1903 (currently *Culicoides puncticollis*; Diptera): proposed precedence over *Ceratopogon algecirensis* STROBL, 1900.

The following opinions were published on September 29, 1989 in Vol. 46, Part 3 of the Bulletin of Zoological Nomenclature.

Opinion No.

1555 *Parasigara* POISSON (Heteroptera): *Corisa transversa* FIEBER, 1848 confirmed as the type species.

1556 *Dytiscus ater* DE GEER, 1774 (currently *Ilybius ater*; Coleoptera) and *Dytiscus planus* FABRICIUS, 1781 (currently *Hydroporus planus*; Coleoptera): specific names conserved.

1557 *Elachista* TREITSCHKE, 1833 (Lepidoptera): conserved, and *E. bifasciella* TREITSCHKE, 1833 confirmed as the type species.

1558 *Dacus parallelus* WIEDEMANN, 1830 (currently *Anastrepha parallela*; Diptera): lectotype replaced.

1559 *Lugita* NAGY, 1967 (Hymenoptera): *Tiphia villosa* FABRICIUS, 1793 designated as the type species.

Two New Stag Beetles of the Genus *Lucanus* from Southeast Asia

By Hanmei Hirasawa[1] and Kôyô Akiyama[2]

Abstract Two new stag beetles of the genus *Lucanus*, *L. koyamai* sp. nov. from N. Thailand and *L. masumotoi* sp. nov. from C. Taiwan, are described.

Recently, we had an opportunity to examine many lucanid specimens from the montane zones of Burma frontier in northwestern Thailand and central Taiwan, through the courtesy of Mr. Nobuhiro Koyama and Mr. Kunio Kume respectively.

As a result of the examination, it became clear that they include each a species of the genus *Lucanus* from the two districts: Siamese species is allied to *L. miwai* Y. Kurosawa from Taiwan and *L. didieri* Planet from Yunnan, and Taiwanese one is allied to *L. kanoi* Y. Kurosawa from Taiwan.

In this paper, two new species mentioned above will be described under the names of *L. koyamai* and *L. masumotoi*.

The holotypes are deposited in the National Science Museum (Nat. Hist.), Tokyo. Some paratypes are entrusted in the Kanagawa Prefectural Museum and the collections of Messrs. Kimio Masumoto, Kunio Kume, Hiroshi Fujita and Katsumi Akita. The remaining paratypes are preserved in the authors' collections.

We wish to express our sincere gratitude to Dr. Shun-Ichi Uéno, Department of Zoology, National Science Museum (Nat. Hist.), Tokyo, for his kindness in permitting are to examine the type specimens preserved in his museum, to Messrs. Hiroshi Fujita, Nobuhiro Koyama and Kunio Kume, for their kind offer of materials, to Mr. Toshio Inomata for taking good photographs.

Lucanus koyamai Akiyama et H. Hirasawa, sp. nov.

(Figs. 1, 2, 5 & 7)

Male: Body relatively slender, about 2.4 times as long as wide, widest before middle of elytra; surface castaneous in general; femora and tibiae yellowish brown except for marginal areas blackish brown; dorsum with inconspicuous pubescence; underside densely clothed with very short whitish yellow pubescence, except for metathorax and front and hind margins of prothorax long, same color pubescence; dorsum

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[1] 2-10, Jôsai 1-chôme, Matsumoto-shi, Nagano, 390 Japan.

[2] 15-10, Daidô 2-chôme, Kanazawa-ku, Yokohama, Kanagawa, 236 Japan.

〔Ent. Rev. Japan, Vol. XLV, No. 1, pp. 53-58, pls. 3-6, June, 1990〕

somewhat shiny, abdomen with indistinct shining.

Head transversely quadrate; clypeus relatively small, slightly transversely trapezoidal, densely punctate except for front and hind margins; frons abruptly declined to apex, widely concave, densely punctate except for lateral sides; vertex nearly flattened, somewhat sparsely punctate all over, more or less rugose punctate on middle, with a pair of indistinct tubercles on ante-lateral portions; ear-formed ridges distinct and faintly warped upwards in anterior halves, with hind angles gently curved; ante-ocular ridges less than ¼ times as long as eyes, somewhat produced laterally in anterior portions and connected with apices of ear-formed ridges, with posterior apices smoothly joined with eyes.

Antenna with segments 6–10 fully lamellate, about ⅓ times as long as 9 club segments in distal 3, and decreasing in length towards segment 6; segment 5 faintly protruding, the apex of protrusion with sparse setae; segments 2–4 each as long as wide.

Mandible underdeveloped in general, about 4–5 times as long as middle width, a little declined anteriad, then slightly bent upwards near apex which is not divaricate and is curved inwards, the extremity being acutely produced; inner margin indistinctly sinuate, without any teeth, just blade-shaped in basal ⅘; surface sparsely punctate.

Pronotum transversely, roundedly quadrate, about ⅝ times as long as wide, widest behind middle, transversely strongly convex, shallowly, somewhat densely punctate on middle part, densely rugose around; dorsum indistinctly with two pairs of small shallow concavities; apical margin gently bisinuate; front angles acutely produced forwards; lateral sides generously arcuate, faintly sinuate in posterior halves; base more or less marginate; hind angles bluntly angulate.

Scutellum nearly hemicircular, about 1.7 times as wide as long, punctate, sparsely with yellowish pubescence.

Elytra elongate elliptical, about 1.4 times as long as wide, somewhat densely with shallow minute punctures in general, sparsely so along suture, rugoso-punctate on apical portions, somewhat densely clothed with inconspicuous, extremely short setae all over.

Protibia less than 4/9 times as long as body length, with 4–5 outer teeth of which the apical two distinctly projected outwards; protarsus about 0.8 times as long as protibia; mesotibia with 1–2 outer teeth besides apical projection, about equal in length to mesotarsus; metatibia with a small outer tooth besides apical projection; metatarsus about 0.9 times as long as metatibia.

Female: Body stout, about 2.3 times as long as wide, widest behind middle of elytra, nearly black in general, muddy yellowish brown at middle of undersides of femora, dark brown at middle of upper-and undersides of tibiae.

Clypeus very small, transversely hemicircular. Posterior part of ante-ocular ridge angulate and somewhat protruding.

Antenna with segments 8-10 lamellate; segments 6-7 protruding, ½-⅓ times as long as 8-10, each provided with several setae at apex.

Mandibles with asymmetrical inner margins (except each distal acute extremity), of which the left is dentate with one trapezoid blade-shaped tooth, the right is dentate with one obtuse tooth.

Pronotum about 1.8 times as wide as long, widest before middle, conspicuously more sparsely punctate than in male; side arcuate in anterior half, somewhat suddenly rounded at middle, nearly straight in posterior half; front angle rounded at right angle; hind angle bluntly angulate; basal margin almost straight.

Elytra 1.45 times as long as wide, apparently sparsely punctate, sparsely with short hairs near apices.

Protibia less than ⅕ times as long as body length, shorter than protarsus; apical two outer teeth much developed and produced laterad.

Meso- and metatibiae each with one outer tooth besides apical projection; meso- and metatarsi about ⅘ times as long as the respective tibia.

Length. Male: 25.5-27.5 mm (including mandibles); 21.5-23.0 mm (without mandibles). Female: 20.5-23.0 mm (including mandibles); 19.5-21.0 mm (without mandibles). *Width.* Male: 9.0-9.5 mm. Female: 8.5-9.0 mm.

Distribution. Northwestern Thailand.

Holotype: ♂, Mt. Doi Pha Hom Pog, ca. 1,930 m in alt., near Fang, Thailand, 10-16. VI. 1989, N. KOYAMA leg. Paratypes: 18♂♂, 3♀♀, the same data as the holotype.

Notes. This new species is allied to *Lucanus miwai* Y. KUROSAWA from Taiwan, but is easily separated from that in the status of male mandibles, difference of fissate joint number of male antennae, shape of female pronotum, etc. Furthermore, it is most allied to *L. didieri* PLANET from Yunnan in having male mandible which is not divaricate, but apparently differs from the latter in the characteristic male mandible with inner margin blade-shaped.

The new species was flying low in herbs in the day. It is therefore considered that this is active in the day just same as Taiwanese *L. miwai*.

Lucanus masumotoi H. HIRASAWA et AKIYAMA, sp. nov.

(Figs. 9, 10, 11, 14 & 16)

Male: Elongate oval, about 2.7 times as long as wide, widest near middle of elytra; dorsum feebly convex. Each surface nearly black, with a dark yellow marking on each upper side of meso- and metafemora and also each underside of metafemora (sometimes absent in the latter), elytra somewhat maroon; dorsum, mandibles and legs almost glabrous and strongly shining, ventral surface subopaque and densely clothed with fine tawny pubescence, which becomes denser and longer in metapleura, meso- and metasterna.

Head nearly oblong, about 1.7 times as wide as long, widest in front; clypeus rather wider than long, coarsely punctate, front margin straight and narrower than base, feebly reflexed, lateral margins distinctly and obliquely truncate, strongly narrowed towards front; frons granulate punctate, arcuate and steeply declined to apex; vertex almost flattened, anterior half granulate punctate, posterior one more sparsely so, each inside of front angle with an inconspicuous depression; ear-formed ridges distinct and smooth in anterior halves, shallowly and sparsely punctate in posterior ones, indistinctly connected with each other at middle of hind margin; ante-ocular ridges ¼ times the length of eyes, not produced laterally but produced backwards, anterior halves gently curved and continued to front angles of head.

Four distal segments of each antenna lamellate and rather short, almost equal in length.

Mandibles very stout but distinctly attenuate towards apices; anterior halves strongly curved inwards (a little more slender and feebly curved in small individuals); apices distinctly forked; each inner margin dentate with 3–4 small teeth, of which the distal 2–3 (sometimes absent in small individuals) are more reduced than the basal in length and width; dorsal surfaces densely punctate on basal halves, more finely and more sparsely so on the remaining portions.

Distal segment of each maxillar palpus simply elongate elliptical, about twice the length of middle segment.

Pronotum transverse elliptical, about 2.5 times as wide as long, widest just behind the middle, feebly convex, rather densely punctate and feebly shining; lateral margins rather strongly produced downwards in the middle, slightly sinuous in anterior and posterior portions; front angles distinctly produced, hind ones obtusely angulate; hind margin very gently arcuate posteriad.

Scutellum linguiform, width subequal to length, with an impunctate longitudinal line at middle.

Elytra elongate elliptical, strongly shining, with fine sparse punctures; caudal portions somewhat rugosely punctate.

Protibia gradually widened towards apex, dentate with 5–8 outer teeth, of which the apical two are distinctly projected outwards; tarsus subequal to tibia in length.

Female: Stout and widely oval, about 2.1 times as long as wide, widest just before middle of elytra; each surface entirely black.

Head transversely oblong and very roughly punctate; clypeus nearly triangular, apex produced forwards and the tip narrowly rounded; each side of vertex with an inconspicuous depression; middle portion of hind head more sparsely and rugosely punctate; ante-ocular ridge with a small tooth before eye.

Antennal lamellae prolonged forwards, a little longer than those of male.

Mandibles strongly punctate, each outer margin evenly and strongly curved inwards; each inner margin dentate with two obtuse teeth, of which the distal one is more remarkably produced and the basal is very rudimentary; dorsal surface with an acute tooth in middle.

Pronotum transverse, about 1.2 times as wide as long, evenly convex, more finely and sparsely punctate than in male; lateral sides obtusely angulate at middle, anterior halves gently convergent to front, posterior ones slightly emarginate; front angles produced forwards, hind ones rectangular and directed obliquely outwards.

Scutellum a little wider than long.

Elytra nearly elliptical, hardly punctate and strongly shining, caudal portions somewhat rugose; apices more gently rounded than those of male.

Each protibia widened towards apex, widest at apical ⅓, dentate with 4-5 outer teeth, of which the distal two are strongly projected outwards.

Length. Male: 30.0-34.5 mm (including mandibles); 25.0-28.5 mm (without mandibles). Female: 27.2-31.5 mm (including mandibles); 24.8-29.0 mm (without mandibles). *Width.* Male: 10.5-12.0 mm. Female: 11.0-13.5 mm.

Distribution. Taiwan.

Holotype: ♂, between Pilu ("Hekiroku" in Japanese) and Shenmu ("Shinboku" in Japanese), ca. 1,800 m in alt., Hualien Hsien, Taiwan, 12-18. V. 1989, J. LUO leg. Paratypes: 14♂♂, 6♀♀, the same data as the holotype; 6♂♂, the same locality as the holotype, 12-16. VI 1989, J. LUO leg.; 4♂♂, the same locality as the holotype, 29. VI. 1989, J. LUO leg.; 1♂, 1♀, the same locality as the holotype, 18. VI. 1986, L. T. YU leg.; 2♂♂, Pilu, Hualien Hsien, 12. V. 1989, J. LUO leg.; 3♂♂, 6♀♀, Pilu, Hualien Hsien, 10-15. VI. 1982, T. SHIMOMURA leg.; 1♂, Pilu, Hualien Hsien, 12. VI. 1981, H. FUJITA leg.; 1♂, 1♀, Pilu, Hualien Hsien, 10. VI. 1981, H. FUJITA leg.

Notes. This new species resembles *Lucanus kanoi piceus* Y. KUROSAWA from Taiwan, but is easily separated from it by the dorsum more strongly shining and blackish in male, the labial mentum more transversely in female.

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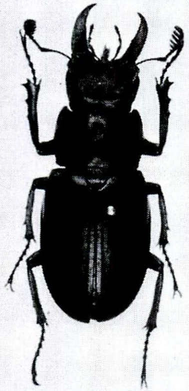
Explanation of Plates 3-6.

Pl. 3. fig.	1.	*Lucanus koyamai* sp. nov., ♂.
	2.	Ditto, ♀.
	3.	*Lucanus miwai* Y. KUROSAWA, ♂.
	4.	Ditto, ♀.
Pl. 4. figs.	5 & 7.	*Lucanus koyamai* sp. nov., ♂.
	6 & 8.	*Lucanus miwai* Y. KUROSAWA, ♂.
Pl. 5. figs.	9 & 10.	*Lucanus masumotoi* sp. nov., ♂.
	11.	Ditto, ♀.
	12.	*Lucanus kanoi kanoi* Y. KUROSAWA, ♂.
	13.	Ditto, ♀.
Pl. 6. figs.	14 & 16.	*Lucanus masumotoi* sp. nov., ♂.
	15 & 17.	*Lucanus kanoi kanoi* Y. KUROSAWA, ♂.

1-4 & 9-13, dorsal views of specimens; 5, 6 & 14, 15, dorsal views of male's anterior halves of the bodies; 7, 8 & 16, 17, dorsal views of male's right protibiae.



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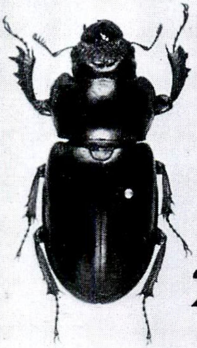

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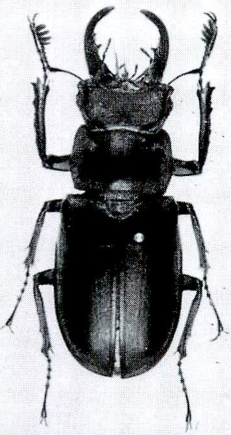

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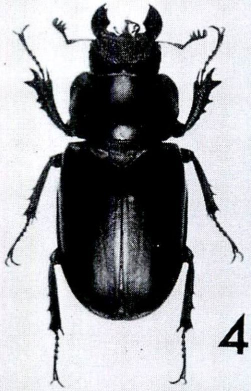

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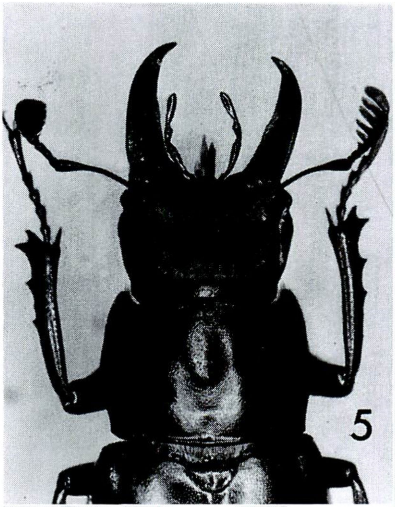

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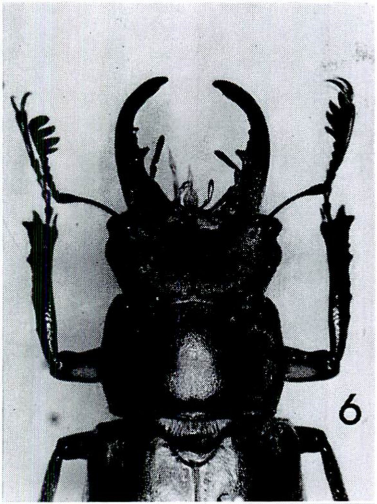

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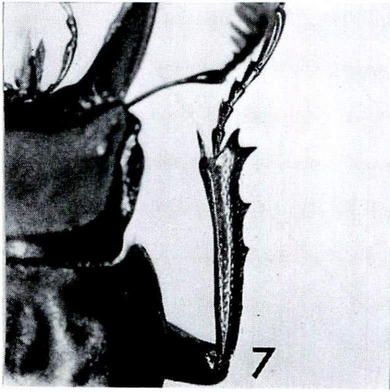

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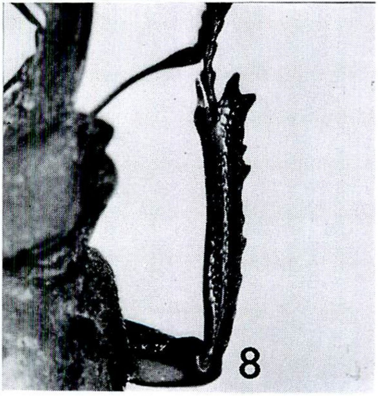

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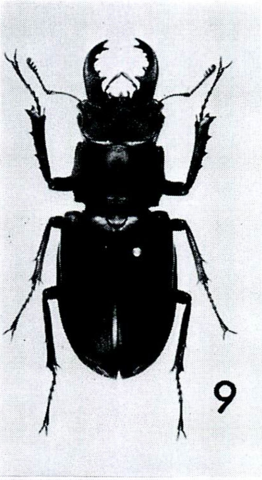
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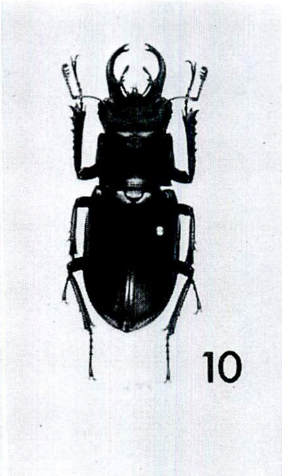
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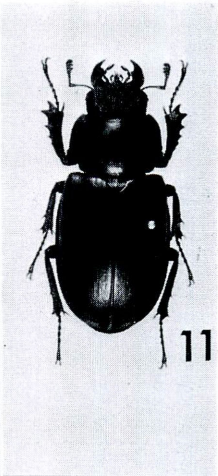
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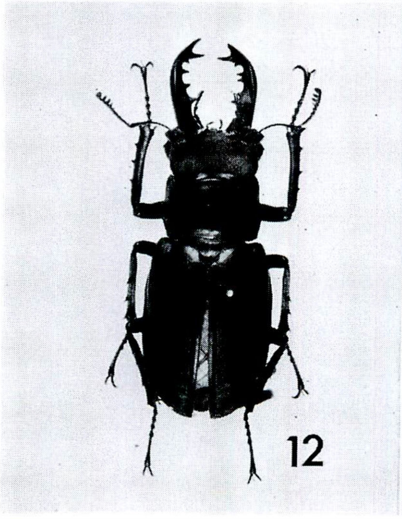
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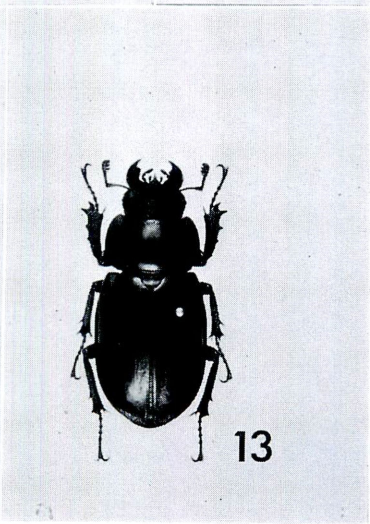
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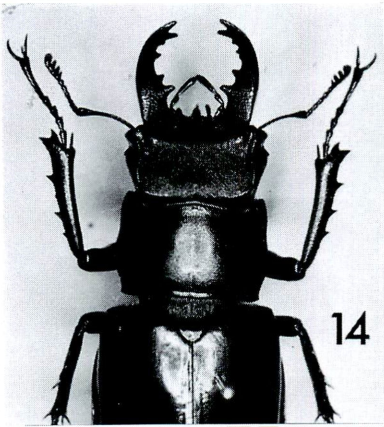

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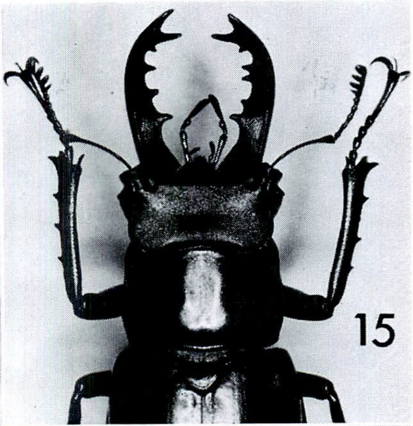

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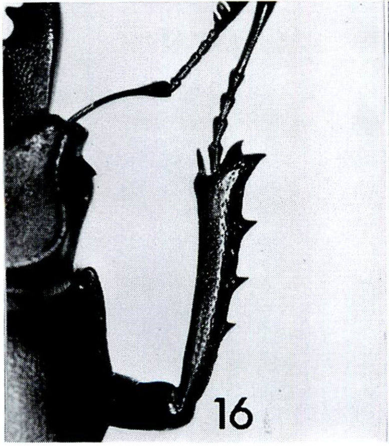

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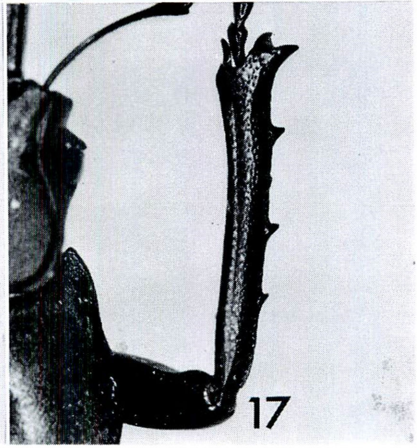

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(T. INOMATA photo.)

Leaf-beetles Collected by P. BERON of the National Natural History Museum — Sofia in Nepal (Coleoptera, Chrysomelidae)

By BLAGOY GRUEV

University of Plovdiv, Bulgaria

This paper presents a list of 28 species of Eumolpinae, Chrysomelinae, Alticinae and Hispinae. Three of them (*Aoria nigripes*, *Hyphasis fulvicornis*, *Pentamesa subfasciata*) are newly recorded to the fauna of Nepal, and five (*Longitarsus langtangensis*, *L. stragulatoides*, *Nepalicrepis castaneus*, *Psylliodes semicnemis*, *Zipangia nepala*) are described as new to science.

I am greatly indebted to my colleague P. BERON for loan of the material, collected by him in Nepal. My best thank also goes to Dr. H. TAKIZAWA of Toxicology Research Laboratories of Tobacco Inc., Japan for identification of the material of Eumolpinae and Hispinae and the species *Acrocrypta tuckuchensis* and *Manobia parvula* of Alticinae. I am grateful to Dr. C. BASU of Zoological Survey of India and to Prof. Dr. S. KIMOTO of the University of Kurume for their valuable assistance.

Subfamily **Eumolpinae**

Aoria nigripes (BALY, 1860)

Material: Ullere, Pokhara-Jomosom trek, 2,100 m, 5. VIII. 1981, 1 ex.

Distribution: India, Sikkim, Andamans, Burma, S. China, Hongkong, Hainan I., Taiwan, Laos, Thailand, Cambodia, Vietnam, Sumatra (KIMOTO, 1967; KIMOTO & GRESSITT, 1982).

New to Nepal.

Basilepta obscurum (JACOBY, 1908)

Material: Pokhara, 900 m, 3. VII. 1981, 1 ex.; Pokhara-Jomosom trek, 1,200 m, 3. VIII. 1981, 1 ex.

Distribution: Nepal, Sikkim, Assam, India (TAKIZAWA, 1989).

Basilepta plagiosum (BALY, 1880)

Material: Dhunche, 2,300 m, 13. VII. 1981, 4 exs.

Distribution: India, Sikkim, Nepal, W. China (Kashgar) (KIMOTO & TAKIZAWA, 1973).

[Ent. Rev. Japan, Vol. XLV, No. 1, pp. 59-66, June, 1990]

Basilepta splendens (HOPE, 1831)
Material: between Dhunche and Thare, 20. VII. 1981, 1 ex.
Distribution: Nepal, India (KIMOTO & TAKIZAWA, 1981).

Colaspoides montana JACOBY, 1900
Material: Betrawati, 600-1,000 m, 21. VII. 1981, 1 ex.
Distribution: Assam, Nepal (KIMOTO & TAKIZAWA, 1973).

Colasposoma semicostatum JACOBY, 1908
Material: Ullere, Pokhara-Jomosom trek, 2,100 m, 5. VIII. 1981, 1 ex.; Pokhara-Jomosom trek, betw. Donje and Dhunche, 2,000-3,000 m, VIII. 1981, 6 exs.; betw. Dhunche and Thare, 20. VII. 1981, 1 ex.; Dhunche, 2,300 m, 13. VII. 1981, 1 ex.; Langtang Valley, Ghora Tabela, 2,700-3,000 m, 16. IX. 1984, 2 exs.; Langtang Valley, 1,200 m, 11. VII. 1981, 1 ex.; Kathmandu, 1,300 m, 20. VII. 1981, 3 exs.; Betrawati, 600-1,000 m, 21. VII. 1981, 1 ex.; Tansen, Lumbini zone, 6. VII. 1981, 3 exs.
Distribution: N. India, Sikkim, Nepal (TAKIZAWA & BASU, 1987).

Nodina parvula JACOBY, 1892
Material: Ullere, Pokhara-Jomosom trek, 2,100 m, 5. VIII. 1981, 21 exs.; Dhunche, 2,300 m, 13. VII. 1981, 1 ex.; Kathmandu, 1,300 m, 26. VII. 1981, 1 ex.
Distribution: Burma, Nepal (KIMOTO & TAKIZAWA, 1973)

Trichotheca sikkimensis TAKIZAWA, 1987
Material: Langtang Valley, Lama Lodge, 2,500-2,800 m, 25. X. 1984, 1 ex.
Distribution: W. Sikkim, India, Nepal (TAKIZAWA, 1987)

Xanthonia fulva TAKIZAWA, 1987
Material: Ullere, Pokhara-Jomosom trek, 2,100 m, 5. VIII. 1981, 1 ex.
Distribution: Nepal (TAKIZAWA, 1987).

Subfamily **Chrysomelinae**

Phratora flavipes CHEN, 1963
Material: Solo, Khumbu Thame, 3,700-3,900 m, 7. XI. 1987, 7 exs.
Distribution: Thibet (Yatung), Nepal, Bhutan (CHEN, 1963; DACCORDI, 1977; WANG & CHEN, 1981; KIMOTO & TAKIZAWA, 1983).

Subfamily **Alticinae**

Acrocrypta tuckuchensis KIMOTO et TAKIZAWA, 1973
Material: between Dhunche and Thare, 20. VII. 1981, 1 ex.
Distribution: Nepal (KIMOTO & TAKIZAWA, 1973).

Altica cyanea (WEBER, 1801)
Material: Dhaulagiri zone, Ghaza-Lete, 1,200-2,450 m, 20. X. 1984, 1 ex.
Distribution: India, Sri Lanka, Nepal, Burma, Afghanistan, Malaya, Sunda Is., Indochina, China, Taiwan, Japan, Philippines, New Guinea, Queensland.

Altica himensis SHUKLA, 1960
Material: Annapurna trek, Modi Khola nr. Chomro, 2,050 m, 4. X. 1987, 16 exs.; Ullere, Rhoda Tirkhebodunga, 1,400-2,000 m, 4. VIII. 1981, 2 exs.; Langtang Valley, Ghora Tabela, 3,100-3,350 m, 17. IX. 1984, 3 exs.; Langtang Valley, Sharpugaon,

2,600-2,800 m, 16. IX. 1984, 2 exs.; Langtang, 3,500-3,600 m, 17. IX. 1984, 1 ex.; betw. Chandanbari and Lauribina, 3,300-3,800 m, 14. VII. 1981, 1 ex.

Distribution: Nepal, India, Sikkim, Taiwan (Shukla, 1960; Kimoto, 1967, 1971).

Aphthona gardneri Bryant, 1941

Material: Annapurna trek, Modi Khola nr. Chomro, 2,050 m, 4. X. 1987, 1 ex.

Distribution: India, Nepal (Gruev, 1985)

Euphitrea micans Baly, 1875

Material: Jiri-Lukla, Nuktala, 1,900-2,200 m, 12. XI. 1987, 1 ex.

Distribution: Java, Sumatra, Borneo, Malaya, N. Vietnam, S. China, Burma, India, Nepal (Scherer, 1969; Kimoto & Takizawa, 1973).

Hespera nigripes Maulik, 1926

Material: Dhunche, 2,300 m, 13. VII. 1981, 1 ex.

Distribution: N. India, Nepal (Scherer, 1969; Takizawa, 1988)

Hyphasis fulvicornis Jacoby, 1905

Material: Betrawati, 600-1,000 m, 21. VII. 1981, 2 exs.

Distribution: Thailand, Vietnam, Malay Archip., Hainan I. (Scherer, 1969).

New to Nepal.

Longitarsus hina Maulik, 1926

Material: Birethanti, 1,040 m, 7. VIII. 1981, 1 ex.; Gokarna Park nr. Kathmandu, 1,400 m, 12. VII. 1981, 1 ex.

Distribution: India, Nepal (Scherer, 1969).

Longitarsus langtangensis sp. n.

Locus typicus. Langtang Valley, Ghora Tabela, 2,700-3,000 m, 16. IX. 1984, 1 male — holotype (author's collection).

Diagnosis. Similar to *L. tavoya* Maulik, 1926 but much smaller. Differs from this also in having antennae shorter and frontal tubercles deeply limited from above.

Description. Body oblong with slightly rounded sides, behind middle strongly constricted (Fig. 1). General colour reddish-brown; legs and antennae yellow, the latter with extremely weakly darkened two apical segments; hind femora dark brown apically. Head smooth and shining, impunctured; frontal tubercles raised, narrow, delimited from above by deep furrows; interantennal ridge narrow and sharp. Antennae filiform, gradually broadened to the apex, extending beyond middle of elytron; segments 2 and 3 shortest, equal in length, segments 4 and 6-11 equal in length, longer than 3, segment 5 longest. Pronotum a little broader than long, subquadratic, sides straight and clearly divergent anteriorly; disc feebly punctured anteriorly and somewhat stronger punc-

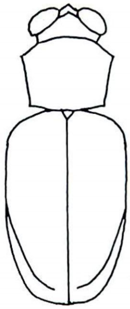

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Fig. 1. *Longitarsus langtangensis* sp. n., general view.

tured basally. Elytron much broader than prothorax, with shoulders angular and with humeral tubercles raised; punctures very deep, strong and dense. Hind tibiae slightly curved.

Aedeagus with nearly parallel sides and with a short triangular apex; underside with a broad longitudinal depression; in profile slightly curved apically (Fig. 2).

Length: 1.9 mm.

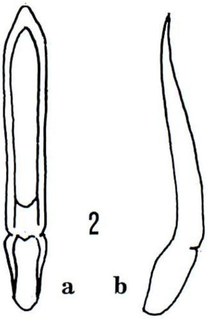

Fig. 2. *Longitarsus langtangensis* sp. n., aedeagus.
a. ventral view;
b. lateral view.

Longitarsus stragulatoides sp. n.

Locus typicus. Birethanti, 1,040 m, 7. VIII. 1981, 1 female — holotype (author's collection).

Diagnosis. The new species is similar to the west-palaearctic *L. stragulatus* (FOUDRAS, 1860) and *L. dorsalis* (FABRICIUS, 1781). Differs from them in having frontal tubercles strongly limited, head yellow and antebasal pronotal impression.

Description. Body oval with slightly rounded sides, moderately convex, shining. Head, pronotum, elytral sides and legs yellow; elytron largely black (Fig. 3); hind femora black; antennae with basal segments 1–3 yellow, the rest segments slightly brownish. Head smooth and shining, without punctures; frontal tubercles triangular, delimited from above by strong furrows; interantennal space raised but not sharp. Antennae filiform, extending beyond middle of elytron; segment 2 shortest, segments 3 and 4 nearly equal in length and longer than 2, segments 5–11 longer than 4, subequal in length. Pronotum short, two times as broad as long, transversely subrectangular, with clear but not deep antebasal transversal impression; disc with small scattered punctures. Elytron nearly parallel-sided in middle part, with small but distinct punctures, partly arranged in dense irregular longitudinal rows. Hind wings developed. Hind tibia strongly dilated apically and curved.

Length: 2.3 mm.

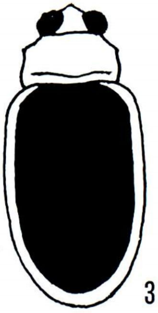

Fig. 3. *Longitarsus stragulatoides* sp. n., general view.

Manobia parvula (BALY, 1874)

Material: Ullere, Pokhara-Jomosom trek, 2,100 m, 5. VIII. 1981, 3 exs.

Distribution: Korea, Japan, Ryukyu Is., Taiwan, Nepal (TAKIZAWA, 1985; KIMOTO, 1986).

Nepalicrepis castaneus sp. n.

Locus typicus. Solo Khumbu-Kharke, 2,400 m, 11. XI. 1987, oak forest, 1 female — holotype (author's collection).

Diagnosis. Dark chestnut brown, strongly shining, with slight metallic lustre. Pronotum parallel-sided, with transverse impression deep and well defined. Interstices of elytron distinctly raised. Differs from *N. darjeelingensis* SCHERER, 1969 in having hind femora not darkened and sides of pronotum parallel, and from *N. smetanai* SCHERER, 1989, *N. loebli* SCHERER, 1989 and *N. besucheti* SCHERER, 1989 in having coloration much darker and transverse impression of pronotum strong and distinct. The place of *N. castaneus* sp. n. in the key of SCHERER (1989) is the following:

1 (6) Basal impression of pronotum distinct.
2 (5) Basal impression of pronotum strong and deep. Body chestnut brown.
3 (4) Sides of pronotum divergent conspicuously in front. Interstices of elytron not raised ……………… *darjeelingensis* SCHERER
4 (3) Sides of pronotum parallel. Interstices of elytron distinctly raised……………… *castaneus* sp. n.
5 (2) Basal impression of pronotum shallow. Body reddish brown……… *loebli* SCHERER
6 (1) Basal impression of pronotum weak and indistinct.
7 (8) Antennal segment 3 distinctly shorter than 2 ……………… *besucheti* SCHERER
8 (7) Antennal segment 3 as long as or even longer than 2………… *smetanai* SCHERER

Description. Body round-oval, strongly convex. Head, pronotum and elytron chestnut brown with slight metallic lustre, smooth and shining; antennae, legs and underside of body reddish brown. Head hemisphaerical, without punctures; frontal tubercles small, subtriangular and transversal, distinctly raised and limited by deep furrows; interantennal space wide and moderately raised; eyes small, elongate. Antennae attaining middle of body; segments 2, 3 and 4 equal in length, shortest. Pronotum 1⅓ as broad as long, with sides parallel and with a deep transverse impression which is limited laterally by clear longitudinal folds; disc sparsely and indistinctly punctulated; a line of punctures on the bottom of the transverse impression more distinct. Anterior coxal cavities closed. Elytron with sides visible from above only in their anterior (⅓) part, with shallow elongated humeral tubercles; punctures extremely fine and arranged in 9 regular rows in the anterior half part of the disc; scutellar row short and depressed; longitudinal intervals between rows distinctly raised. Hind wings not developed.

Length: 2.20 mm, width: 1.55 mm.

Nonarthra variabilis BALY, 1862

Material: Langtang Valley, Khangjung Village, 2,200 m, 19. IX. 1984, 1 ex.

Distribution: Afghanistan, India, Sri Lanka, Nepal, Sikkim, Burma, Vietnam, China, Hainan I., Taiwan, Ryukyu Is.

Pentamesa subfasciata WEISE, 1895

Material: Annapurna trek, Modi Khola nr. Chomro, 2,050 m, 4. X. 1987, 1 ex.

Distribution: India (SCHERER, 1969; LOPATIN, 1984).
New to Nepal.

Psylliodes semicnemis sp. n.

Locus typicus. Dhunche, 2,300 m, 13. VII. 1981, 1 female — holotype (author's collection).

Diagnosis. The new species belongs to the subgenus *Semicnema* with the following known representatives: *reitteri* WEISE s. str., *reitteri parallela* WEISE, *macella* WEISE s. str. and *macella agropyri* PALIY. It differs from them in having body not flattened and not parallel-sided but oblong elliptic (Fig. 4).

Description. Black with strong greenish-bronzy lustre; antennae and legs yellowish brown, the former with segments 7-11 darkened; hind femora black with metallic lustre. Head a little visible from above, with frons entirely covered by deep and dense punctures; interspaces rough; frontal tubercles narrow, divided from each other by a small but deep fossa and not clearly delimited from above; interantennal space short and raised but not sharp. Antennae filiform, exceeding middle of body; segment 1 thin and strongly curved, equal in length with segments 4 and 11, longest; segments 2 and 3 equal and shortest, segments 5-9 equal and shorter than 4. Pronotum convex, nearly 1¼ as broad as long, with slightly rounded sides, widest at middle; punctures strong and dense, interstices rough; anterior angles obliquely truncated and prominent; posterior angles weakly angulate. Scutellum rounded triangular, without punctures and without metallic lustre. Elytron with moderately raised humeral tubercles; humerus rounded but not angulate; longitudinal rows strong and regular, with deep and large (larger than those of pronotum) punctures; interstices not raised, as wide as rows, with distinct and dense punctures; scutellar row reaches middle of elytron. Hind wings developed. Posterior tibiae stout and straight. Hind tarsus inserted at middle of tibia.

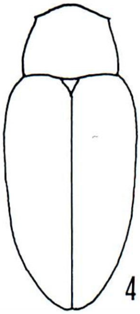

Fig. 4. *Psylliodes semicnemis* sp. n., general view.

Length: 3.3 mm.

Zipangia nepala sp. n.

Locus typicus. Ullere, Pokhara-Jomosom trek, 2,100 m, 5. VIII. 1981, 1 female — holotype (author's collection).

Diagnosis. The new species is similar to *Z. fulvicornis* SCHERER, 1979. Differs from this in having: elytron with subbasal convection strongly raised; antenna with segments 2, 3, 4 and 6 equal in length; space between eyes and basis of antennae without punctures.

The genus *Zipangia* is herein newly recorded to Nepal.

Description. Body relatively short, 2⅕ as long as broad. Light yellowish brown; elytron with suture extremely narrow brown; hind femora slightly darkened apically. Head entirely smooth and shining, without punctures; frontal tubercles rhombic and flat, separated from each other and from above by deep grooves; frontoclypeus triangularly raised, distinctly broader than long. Antennae exceeding middle of elytron; segments 2, 3, 4 and 6 equal in length, shortest, segments 5 and 7-11 longer and subequal in length. Pronotum 2⅕ as wide as long, with slightly rounded sides, broadest in the middle; transversal furrow distinct, not attaining sides of pronotum; punctures deep and dense; interstices smooth and shining. Elytron (fig. 5) slightly rounded, distinctly costate from humerus to apex, with humerus well raised and with basal portion of disc strongly convex and limited from behind by a deep depression; punctures deep and dense, their diameter broader than interstices; interstices smooth and shining.

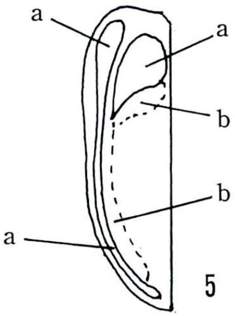

Fig. 5. *Zipangia nepala* sp. n., elytron. a. convex; b. depressed.

Length: 2.2 mm.

Subfamily **Hispinae**

Dactylispa brevispinosa (CHAPUIS, 1877)

Material: Langtang Valley, Khangjung Village, 2,200 m, 19. IX. 1984, 2 exs.; Langtang, Sharpugaon, 26. IX. 1984, 1 ex.

Distribution: India, Nepal, Sikkim, Bhutan, Burma (KIMOTO & TAKIZAWA, 1973; WÜRMLI, 1975). Recorded to Nepal by GRUEV, 1985 under the name *D. srnkae.*

Rhadinosa lebongensis MAULIK, 1919

Material: Langtang, Khangjung-Sharpugaon, 2,225-2,600 m, 26. IX. 1984, 1 ex.

Distribution: India, Sikkim, Bhutan, Nepal (WÜRMLI, 1975; TAKIZAWA, 1988).

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Notes on the Species of *Nazeris* from Japan, II
(Coleoptera, Staphylinidae)

By Tateo Ito

I have recently been able to observe and dissect the holotype of *Nazeris optatus* (Sharp). After my careful examination I have found that the species treated as *N. optatus* by me in 1986 (in the first paper[1] of this series) has been another species. Therefore I would like to correct the treatment and submit a redescription of true *N. optatus* and also describe several new species allied to *N. optatus* in this series.

I am very sincerely thankful to Dr. R. Aldridge, British Museum (Natural History), who gave me every facility and generosity for my examining the holotype of *Nazeris optatus* (Sharp) preserved in the collection of the British Museum, to Mr. Y. Miyatake, Osaka Museum of Natural History, who was ready to receive the holotype from the British Museum, to Dr. M. Uhlig, Museum für Naturkunde der Humboldt-Universität zu Berlin, who lent me the several European and Mediterranean species of *Nazeris* and to Dr. G. M. de Rougemont in London, who sent and gave me a few materials from Nepal and Thailand. And I am greatly indebted to Messrs. Y. Watanabe, S. Hisamatsu, Y. Shibata, Y. Hirano, M. Yasui, I. Okamoto and Dr. S. Takahashi for their kind helps in many materials from several localities of Japan.

Nazeris optatus (Sharp) (Figs. 1–4)

Mesunius optatus Sharp, 1889, Ann. Mag. Nat. Hist., (6) 3 : 332.
Nazeris optatus : M. Bernhauer et K. Schubert, 1912, Col. Catalog. Staphylinidae 3 : 212.
Nazeris optatus : C. Koch, 1939, Ent. Bl., 35 : 161.
Nazeris optatus : T. Adachi, 1955, J. Toyo Univ., (7) : 17.
Nazeris optatus : Y. Shibata, 1977, Ann. Bull. Nichidai Sanko, 20 : 31.
(nec *Nazeris optatus* : T. Ito, 1986, Ent. Rev. Japan, 41 (2) : 90.)

Body narrow, subdepressed above, little shiny, reddish brown, 7th and 8th segments of abdomen and basal two segments of antennae dark brown, the other segments of antennae and legs yellow, femora and tibiae slightly darkened; pubescence of body greyish brown, but those of mouth parts, some apical segments of antennae and legs yellowish brown. Length : 4.0–4.8 mm.

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[1] On the species of *Nazeris* from Japan, I., Ent. Rev. Japan, 41 (2), 1986.

〔Ent. Rev. Japan, Vol. XLV, No. 1, pp. 67–71, June, 1990〕

Head subquadrate, nearly as long as wide, with punctures coarse, close and somewhat regular in size, and with microsculpture isodiametrical and clear, which on vertex and marginal area of frons scarcely visible, inner two teeth of labrum blunt and a little shorter than the outer two, frons weakly depressed, vertex more or less transversely and slightly convex, with a faint, irregular and V-shaped impression, whose both the ends extending to antennal prominences, narrow area between the impression and each eye slightly depressed, longitudinal diameter of eye a half as long as subparallel-sided postgenae, antennae passing middle of pronotum, all segments distinctly longer than wide, 1st segment robust and large, as long as the following two segments together, 3rd one-third longer than 2nd and to 10th gradually shortened distally, 10th twice as long as wide, shorter and narrower than 11th. Underside of head similarly punctate and microsculptured as on the upper side, but the microsculpture obscurely and irregularly reticulate, rather seemingly aciculate, mentum trapezoidal, well-chitinized and smooth, submentum finely and uniformly scabrous.

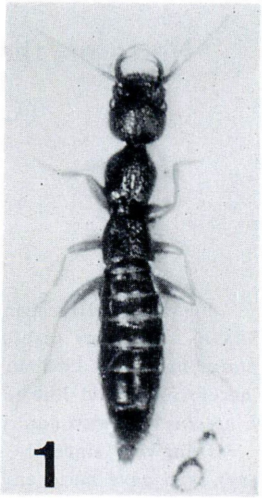

Fig. 1. Holotype of *Nazeris optatus* (Sharp).

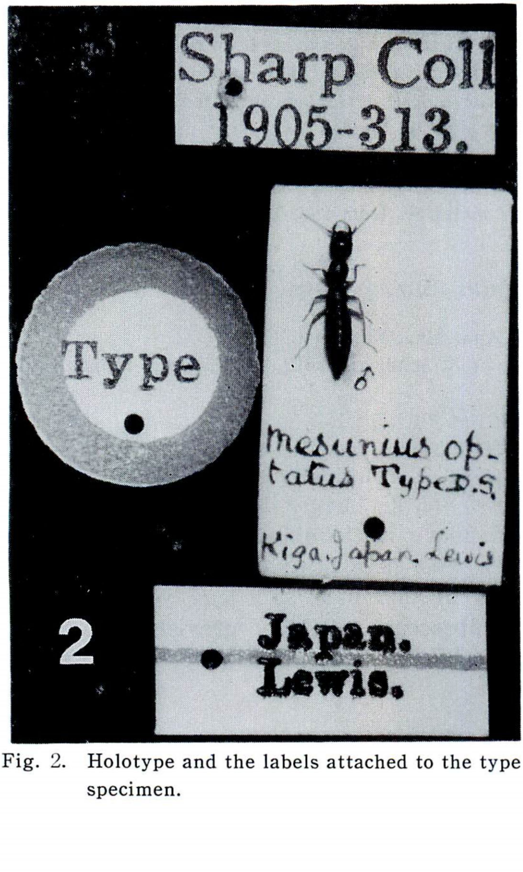

Fig. 2. Holotype and the labels attached to the type specimen.

Pronotum oval, longer than wide (1.15 : 1), as long as and a little narrower than head (1 : 1.10), more coarsely, less closely and less regularly punctate than on head, three long and erect setae submarginally placed at and near the widest point being at apical third, from there sides wholly rounded apically and slightly narrowed to rounded basal angles, basal margin substraight, median line narrow, smooth, not beyond basal half, and distinctly depressed on each side. Scutellum linguiform, distinctly punctate. Elytra dilated distally, widest near apex, where the width about twice as wide as base and a little wider than the pronotal width (1.05 : 1), surface weakly, rather finely and a little rugosely undulate, with punctures coarser than on head and less than on pronotum.

Prosternum sharply carinate from base to apex, rugosely punctate except subapical part, meso- and metasterna distinctly but not rugosely punctate, each proepipleural process with about ten large and deep punctures.

Abdomen slightly expanded laterally, with microsculpture wholly strigulate, clearly visible but weaker than on head, and with punctures smaller and sparser on basal segments than on head, and becoming smaller and sparser distally, those on each tergite coarser at base than at apex and very fine on the apicalmost tergite, and on each sternite much deeper and stronger than on the corresponding tergite. In the male 7th sternite with median depression from near base to apex, impunctate, shiny and very deep, and much more deepened apically (so the lateral walls at apex nearly vertical), apical margin deeply excised (Fig. 3), with a tuft of some long, black and stiff hairs on each outside of the excision, 8th sternite with median depression shallow, ill-defined, impunctate and smooth, apical margin deeply and rather narrowly excised, the depth of the excision about 2.5 times as deep as its width. Legs slender, hind femora without any setae, and their trochanters unarmed in both sexes, hind tarsi two-thirds

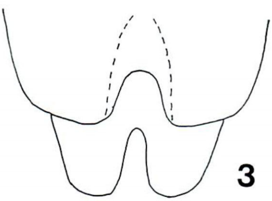

Fig. 3. The outlines of 7th and 8th sternites of *Nazeris optatus* (SHARP).

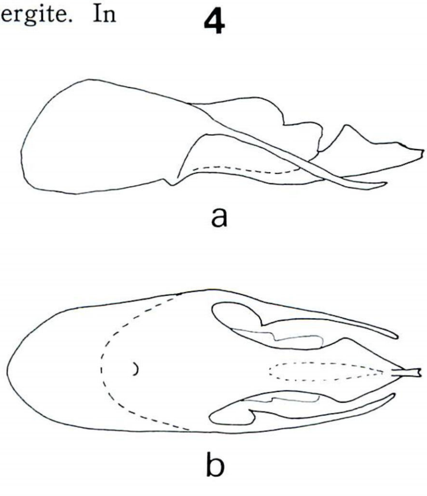

Fig. 4. Aedeagus of *Nazeris optatus* (SHARP). a : in lateral view ; b : in ventral view.

as long as tibiae.

Aedeagus (Fig. 4) relatively large, median lobe pen-shaped in dorsal view, constricted laterally from middle to apical fourth, then convergent to apex, dorsally with a longitudinal depression along middle, apex distinctly protuberant as a short process, its tip finely bifurcate; apophyses[2] (sense in litt. H. COIFFAIT, 1971, 1973 & 1981) slender, becoming thinner toward apex, and not reaching apical tip of median lobe, each with a tooth at basal third triangular and curved basally, the teeth slightly asymmetrical to each other.

Female apparently wider and robuster, and more clearly microsculptured than in male.

Specimens examined: 1♂, holotype, "Kiga, Japan, Lewis (Sharp Coll., 1905-313)"; Kanagawa Pref., 2♂♂, Bodai, Tanzawa, 29. IV. 1970, Y. SHIBATA leg., 1♀, ditto, 23. X. 1977, Y. HIRANO leg., 1♂, Ohkura, Tanzawa, 2. V. 1971, Y. SHIBATA leg., 1♀, Kajiyashiki, Tanzawa, 23. IV. 1975, Y. HIRANO leg., 1♂, Shibusawa, Tanzawa., 27. III. 1977, Y. HIRANO leg., 1♂, Mt. Oyama, 15. VI. 1974, Y. SHIBATA leg., 2♀♀, Mt. Kamiyama, Hakone, 30. VI. 1983, Y. WATANABE leg., 1♀, ditto, 26. V. 1975, Y. SHIBATA leg.; Shizuoka Pref., 1♂, Omote-Fuji, 20. IX. 1970, Y. SHIBATA leg.; Yamanashi Pref., 6♂♂, 4♀♀, Daibosatsu, 7. VII. 1988, T. ITO leg., 2♂♂, ditto, 16-17. X. 1982, Y. SHIBATA leg., 1♂, ditto, 17. IX. 1984, H. SATO leg., 1♀, Keitokuin, 8. VII. 1988, T. ITO leg., 2♂♂, Otsuki, 23. V. 1982, Y. WATANABE leg.; Tokyo Pref., 1♂, 1♀, Mt. Kumotori, 8. VII. 1965, Y. WATANABE leg., 2♂♂, Mt. Mitake, 5. V. & 10. IX. 1967, Y. SHIBATA leg.

Nazeris watanabei sp. nov. (Figs. 5-6)

The present new species is closely allied to *N. optatus* (SHARP) in general appearance, though it is distinguished from the latter by the following points: In the male the tuft of the 7th abdominal sternite composed of longer hairs, the 8th sternite much more deeply excised (Fig. 5), the depth of excision a half deeper than in *optatus*, the aedeagus (Fig. 6) different in shape, the median lobe hooked at tip instead of being bifurcate, and dorsally with three processes on each lateral side, in which the apical process rather long, incurved and pointed, the middle process short and wide in lateral view, the basal one small; the apophyses not becoming thinner toward apex, reaching neither the apical tip of median lobe nor the apical process, and unarmed but only subangulate at basal third, while the apophyses in *optatus* dis-

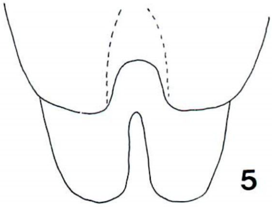

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Fig. 5. The outlines of 7th and 8th sternites of *Nazeris watanabei* sp. nov.

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[2] parameres (T. ITO, 1986, Ent. Rev. Japan, 41 (2) : 90-91)

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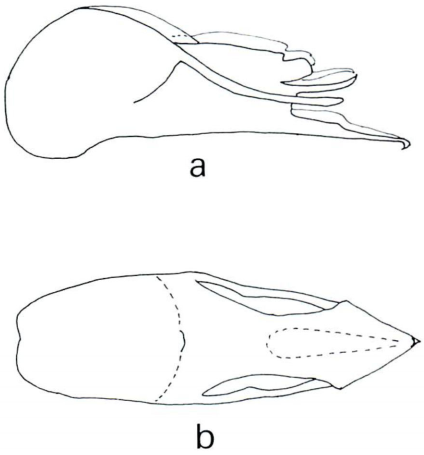


Fig. 6. Aedeagus of *Nazeris watanabei* sp. nov.
a : in lateral view ; b : in ventral view.

tinctly toothed at the same positions, the head more distinctly microsculptured even on vertex, the inner two teeth of labrum shorter and somewhat wider, the pronotal and elytral punctures coarser and deeper, the body a little wider and robuster. Length : 4.3–4.5 mm.

Female unknown.

Holotype : ♂, Ohdaru Spa, Shizuoka Pref., 15. V. 1965, Y. WATANABE leg. (Tokyo University of Agriculture coll.). Paratype : 1♂, Mt. Amagi, Shizuoka Pref., 4. X. 1960, Y. WATANABE leg.

国際動物命名委員会からのお願い (13)

The following applications were published on December 19, 1989 in Vol. 46, Part 4 of the Bulletin of Zoological Nomenclature. Comment or advice on these applications is invited for publication in the Bulletin and should be sent to the Executive Secretary, I. C. Z. N., c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, U. K.

No opinions were published in this part.

Case No.

2676 *Ochthebius* Leach, 1815 (Coleoptera): proposed conservation of *Elophorus marinus* Paykull, 1798 as the type species.

2678 *Curculio viridicollis* Fabricius, 1792 (currently *Phyllobius viridicollis*; Coleoptera): proposed conservation of the specific name, and *Rhyncolus* Germar, 1817: proposed designation of *Curculio ater* Linnaeus, 1758 as the type species.

2685 *Corisa verticalis* Fieber, 1851 (currently *Trichocorixa verticalis*; Heteroptera); proposed conservation of the specific name.

2694 *Exoprosopa* Macquart, 1840 (Diptera): proposed confirmation of *Anthrax pandora* Fabricius, 1805 as the type species.

2702 *Culex stigmatosoma* Dyar, 1907 and *C. thriambus* Dyar, 1921 (Diptera): proposed conservation of the specific names by suppression of *C. peus* Speiser, 1904.

2719 *Musca heraclei* Linnaeus, 1758 (currently *Eureia heraclei*; Diptera); proposed conservation of *heraclei* as the correct spelling of the specific name.

日本産クチブトコメツキ属について

大　平　仁　夫

Notes on the Genus *Silesis* (Elateridae) from Japan

By Hitoo Ôhira

クチブトコメツキ類は *Silesis* 属によって代表される種群で，東南アジア地域に分化していて，現在50種ほど知られている．このうち日本には10種あまり記録されている．また，本属の近属に琉球から *Okinawana* 属が知られている．

筆者はこれら両属の種について調査を進めているうちに，属の所属について若干の知見を得たのでここに報告する．

Silesis 属の特徴

Silesis 属を設立したのは Candèze (1863) で，属のタイプ種は Hyslop (1921) が指定した *Silesis hilaris* Candèze, 1863 と呼ばれる Sri Lanka (昔の Ceylon) 産の種である．Candèze (1863) による *Silesis* 属の特徴の記載はおよそ以下のようである．

前頭横隆線の前縁は切断状をしており，触角の第 2, 3 節は円錐形状でほぼ等長 (coniques et égaux)．前胸背板の側縁は前方に向って下方へ湾曲しており，肢の第 4 跗節の下側は膜状に伸展している．爪は櫛歯状をしている．

これらの特徴は，日本に分布する種の特徴ともよく一致している．また，日本から最初に本属の種を記録したのは Candèze (1873) で，G. Lewis の採集品にもとづいて *Silesis musculus* という新種を記載している．和名はよく知られているクチブトコメツキである．

筆者は本属の形態を詳しく知るため，British Museum (N. H.) に保管されている本属の基準種に指定されている *Silesis hilaris* を借用して調査することができた．それは図 (Fig. 1) に示した syntype に指定されている個体で，標本の状態はきわめて悪いが，主要形態は調査することができた．ラベルの産地 Ceylon: Rambodde は原記載にある産地と一致しており，British Museum (N. H.) の Hayek 女史によれば，同定ラベルの筆蹟も Candèze のものであるということである．

筆者は幸い自身の標本の中に，これと同種の Sri Lanka 産の個体が見出されたので，さらに詳しい形態を調査した．それは図 (Pl. 7) に示したようで，各部の形態は日本に広く知られているクチブトコメツキの形態に一致するところも多いが，主要形態のいくつかに相違

〔昆虫学評論，第45巻，第1号，73-75頁，第 7 図版，6月，1990年〕

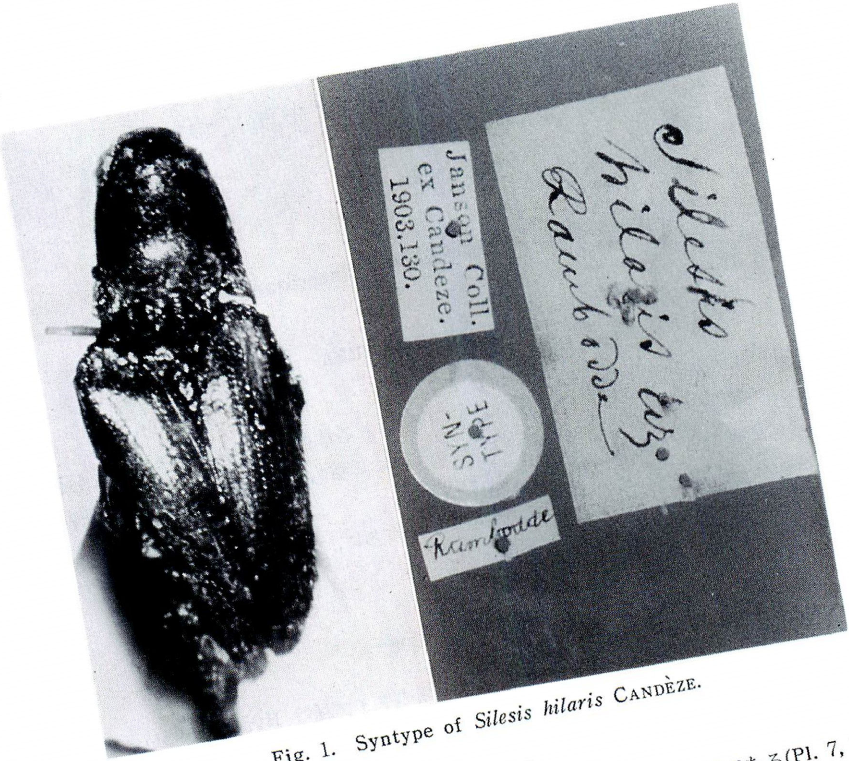

Silesis hilaris typ. Cambodge
Janson Coll. ex Candeze. 1903.130.
TYPE SYN-
Kambodge

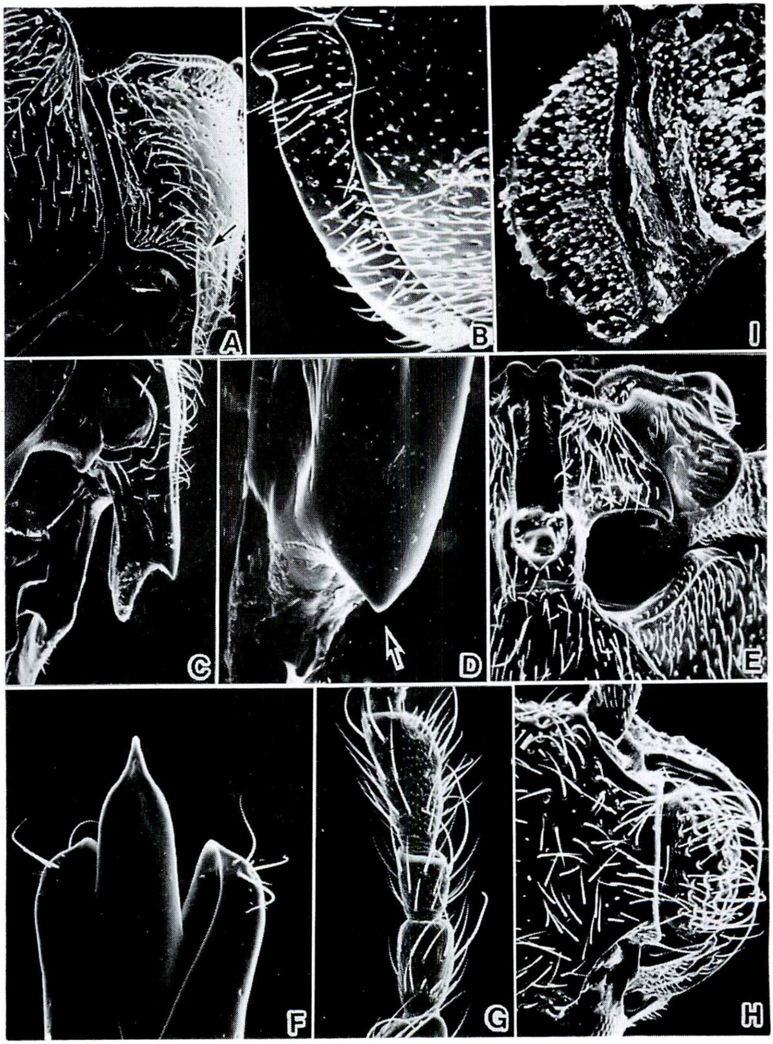
Fig. 1. Syntype of *Silesis hilaris* Candèze.

が見出された．その主なるものは以下のようである．

1. 前頭横隆線の縁取りはきわめて明瞭で，前縁も含めて U 字形状である(Pl. 7, H).
2. 前胸腹側板線は幅広い二重線状で，直線状をしている (Pl. 7, A).
3. 前胸腹板突起の基部は，隆起線が同腹板内に多少とも伸長している(Pl. 7, A の↑印).
4. 前胸腹板突起の末端近くにある顕著な段刻は1歯状である (Pl. 7, C, D の↑印).
5. 第7腹節の腹板の末端は湾曲し，くびれてとがらない．
6. 雌内部生殖器の **bursa copulatrix** 内の1対の扁平状の角質化した板状物は楕円形状をしており，クチブトコメツキ類のように板の一端が細長く柄状に伸長していない (Pl. 7, I). また，袋内にある他の針状物の分布も著しく相違している．

その他，腰板 (Pl. 7, B), の中肢基節腔と周辺部 (Pl. 7, E), 雄交尾器末端部（背面）(Pl. 7, F), 触角の基部節 (Pl. 7, G) などの形態は図示したようである．

これらの一連の研究から判断したところによれば，従来日本のクチブトコメツキなどの種に適応されてきた *Silesis* 属は，実体に合わなく，これとは別の属のものと判断されるので，ここに新属を設立して含めることにした．また，沖縄本島，徳之島などから見出された *Silesis hatayamai* Kishii, 1975 ハタヤマクチブトコメツキを基準種にして Kishii (1976) は *Okinawana* 属を設立しているが，この属の主要特徴は前述の *Silesis* 属の特徴とよく一致することが判明した．筆者は *Okinawana* 属は *Silesis* 属のシノニムと判断し，命名上の処理も合



(H. Ôhira photo.)

せて行うことにした.

日本の各地に広く分布する *Silesis* 属の種とされてきたものは，日本や東南アジア地域で分化したグループで，真の *Silesis* 属の種の方が系統上ではより古い位置にあると判断される．ここに ***Parasilesis*** 属を新設し，***Silesis musculus*** CANDÈZE, 1873 クチブトコメツキを属の基準種に指定したいと思う．和名は従来どうりで，*Silesis* 属はツヤクチブトコメツキ属で，***Parasilesis*** 属はクチブトコメツキ属でよいと思われる.

Genus *Parasilesis* nov.

Type-species : *Silesis musculus* CANDÈZE, 1873, Mém. Soc. r. Sci. Liège, (2) 5 : 31 (Japan).

This new genus is very closely allied to the genus *Silesis* CANDÈZE, 1863 (Type-species : *Silesis hilaris* CANDÈZE, 1863, from Sri Lanka), but can be distinguished from the latter in the following points.

1. Clypeal margin U-shaped, but weakly ridged at anterior rim.
2. Outer surface of prosternal process tridentate near apex, but not unidentate.
3. Seventh sternite of abdomen more or less pointed apically.
4. A pair of sclerotic plate in bursa copulatrix of female usually having long handle in each, but not subovate.

Genus *Silesis* CANDÈZE, 1863

Type-species : *Silesis hilaris* CANDÈZE, 1863.

Genus *Okinawana* KISHII, 1976, Bull. Heian High School, (20) : 54 (Type-species : *Silesis hatayamai* KISHII, 1975, Bull. Heian High School, (19) : 6). **Syn. nov.**

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KISHII, T., (1975) ; Some new forms of Elateridae in Japan (VIII). Bull. Heian High School, (19) : 1–7, 2 pls.

—— (1976) ; Some new forms of Elateridae in Japan (XI). Bull. Heian High School, (20) : 47–56, 5 pls.

Explanation of Plate 7.

Silesis hilaris, male (except for I which is female), Sri Lanka.

A, sterno-pleural suture ; B, basal plate ; C, prosternal process, lateral aspect ; D, unidentate area of prosternal process ; E, mesocoxal cavity and its vicinity ; F, apical portion of aedeagus, dorsal aspect ; G, 2nd to 4th segments of antenna ; H, clypeal margin.

第41回（平成元年度）大会記録

平成元年度の第41回大会は，同年12月10日午前10時30分から大阪市立自然史博物館において開催された．午前中は恒例の自由懇談及び甲虫の同定が各グループごとに行われ，それぞれ虫談に花が咲いた．

午後1時から澤田幹事の司会により，大倉幹事から会務会計報告があった後，まず奈良一氏から“台湾の最近の採集地について”と題し講演が行われた．台湾では国家公園内は勿論のこと，そのほかでも採集禁止が伝えられているが，現在調査中である旨の前提のもとに，最近の好採集地について詳細な説明があった．続いて的場績氏から“日本産 *Myosides* 属ゾウムシについて”の話があり，和歌山県下では2種の *Myosides* が互に棲み分けている由であった．さらに予定外の講演として，今坂正一氏の“日本産ジョウカイボン科について”と題する話が，多量のテキストのもとに行われたが，この類の分類は従来は爪の形を主にしていたが，演者は♂交尾器の形を重視すべき考えであり，今後相当数の新種が出るものと思われるとのことであった．最後に黒澤良彦氏から“ミヤマクワガタ属の平行進化について”と題し，同属は現在8グループに分けられるが，各グループの原始的な種は初めは近よった地域で発生し，それが進化の過程で各グループに分かれ，それぞれ大顎が伸び，耳状突起が出てきて現在のような姿になったとの話であった．

午後4時終了の予定が，5時をすぎても終らぬ状態で，一部の演者には折角持参していただいたスライドも割愛せねばならぬような盛況であった．

なお，当日の出席者（敬称略・＊は懇親会出席者）は下記のとおり．

*秋田勝巳・藤野直也・藤田國雄・畑山武一郎・平田信夫・*穂積 俊文・生谷 義一・*今村隆一・*今坂正一・*岩崎　博・金澤　至・*黒澤良彦・*楠井善久・*的場　績・*松田　潔・*水野弘造・森　和夫・中山紘一・*奈良　一・*野村　全・*大石久志・*大川親雄・*大倉正文・奥田則雄・*佐々治寛之・*佐藤 正孝・澤田 高平・田村　保・*田中昭太郎・豊嶋　弘・*遠山雅夫・*豊嶋亮司・*渡辺昭彦・*八木正道・*山地　治・吉原一美．（大倉）

松前小島(北海道)のコガネムシ主科の記録

楠　井　善　久

Notes on Some Scarabaeoidea from Matsumae-Kojima Island, Hokkaido.

By Yoshihisa Kusui

松前小島は北海道の南端，渡島半島の西約 20 km の海上に浮かぶ周囲 4 km の小島嶼である．標高は 293 m で面積に比して高く，周囲は海蝕崖が海岸に迫り，極めて急峻で平地はみられない．植生をみると，かつては森林に被れていた記録はあるが，現在は島の中央部にイタヤカエデを主としたわずかな林を残すのみで，島の大部分は草原となっている．また，島を取り囲む崖は各種の海鳥の繁殖地となっている．気候は対馬海流の影響により温暖で，海藻等の海産生物の分布に，この島周辺を北限とする種が報告されている．

この島の昆虫に関する報告は少なく，コガネムシ主科については仲村ら (1985) により3種記録されているのが唯一のようである．さらに神棒 (1986) は，この時の同じ採集品からクワガタムシ2種を詳細に報告している．

筆者は1986年8月9日，同島の昆虫を調査する機会を持ったので，わずかな種類数であるがコガネムシ主科について報告したい．

採集目録

Lucanidae クワガタムシ科

1. *Nipponodorcus rubrofemoratus* (Snellen van Vollenhoven) アカアシクワガタ
検視個体：3♂♂1♀．

2. *Macrodorcas striatipennis* Motschulsky スジクワガタ
検視個体：1♀．

Trogidae コブスジコガネムシ科

3. *Trox niponensis* Lewis チビコブスジコガネ
検視個体：3♂♂2♀♀．

次種とともに死後かなり日数の経過したと思われる乾燥した海鳥の幼鳥とウサギの死体にみられた．ウサギは近年になって渡島大島から移入したものである．

〔昆虫学評論，第45巻，第1号，77–79頁，6月，1990年〕

4. *T. opacotuberculatus* MOTSCHULSKY ヒメコブスジコガネ

検視個体：2♂♂5♀♀.

前胸側縁の2波状は，前方のものが弱くなる個体がみられた.

Scarabaeidae コガネムシ科

5. *Anomala rufocuprea* MOTSCHULSKY ヒメコガネ

検視個体：16♂♂9♀♀.

強い青緑色で，他の色彩変異の個体はみられない．日本東北部に多くみられる前胸背中央両側の黒色の光沢のない部分を持たない．上翅の大きい点刻は強く，上翅中央付近で横の点刻と融合し，時には波状をなす．以上のような特徴を持つ個体は他の地域でもみられなくはないが，このように単一な形質のみを示す地域はない．石田 (1982) は渡島大島の本種を報告し，色彩の出現するパターンが北海道本島や東北地方と同じであるとしている．北海道本島と本州北端から距離的に近い松前小島の方に変異の出現する傾向がみられることは興味がある．

海岸から山頂付近まで，オオイタドリの葉上に多くみられたが，食性の同じである次種と混生しているところは見られなかった.

6. *A. lucens* BALLION ツヤコガネ

検視個体：14♂♂8♀♀.

やや大形．頭楯，側縁を除く前胸背は青緑色，上翅は黄褐色で他の地域で多くみられる青緑色の強い個体はみられない．この傾向は北海道北部に位置する利尻島産の本種にもみられる（未発表）が，松前小島に近い奥尻島ではこのような個体はみられない.

7. *Eucetonia pilifera* (MOTSCHULSKY) ハナムグリ

検視個体：4♂♂14♀♀.

緑色が強く，体毛がやや少ない．上翅の白色斑が小さい等の傾向が安定してみられるが，これらは北海道本島産にみられる個体変異の範囲内と考えられる.

要　約

1) 松前小島のコガネムシ主科を3科7種記録した．このうちクワガタムシ科2種を除き，すべてこの島から新しく記録されるものである．他に，仲村らはクロコガネの1種を種名不明のままで報告している.

2) 分布する7種はいずれも北海道，本州に分布する種であるが，コガネムシ科3種に遺伝子の偏在が推定された.

3) コブスジコガネ2種の分布は他の科の種類数に比較して多いものである．海鳥の繁殖地であることが餌を豊富にしているものと思われる.

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琉球列島の小島嶼におけるコガネムシ主科分布ノート

3. 粟国島

楠井善久

Distributional Notes of Scarabaeoidea from the Islets, Belonging to the Ryukyu Archipelago.

III. Agunijima Is.

By Yoshihisa Kusui

粟国島（Agunijima）は沖縄本島の西約 60 km，北緯26度34分，東経127度13分に位置する，周囲約 12 km，面積約 7.9 km^2 の小島である．沖縄群島を構成する島嶼ではあるが，琉球列島の地質構成区分からは久米島と同系列とされていて，沖縄本島とは異なる地質とされ，生物地理学的に興味のある島である．最高地点 97.3 m の平坦な島で，島の大部分がソテツを散在させた草原で被われ，その一部は牛馬を主とした放牧地に利用されている．

この島の昆虫の報告は全くないようである．筆者は1987年5月と8月の2回，この島で昆虫の調査を行ったので，コガネムシ類について知見を報告する．

〔昆虫学評論，第45巻，第1号，79-80頁，6月，1990年〕

Hybosoridae

1. *Phaeochrous emarginatus* Castelnau フチトリアツバコガネ
2 exs., (Aug. 3).

Scarabaeidae

2. *Onthophagus viduus* Harold マルエンマコガネ
1♀, (May 3).
草地，路上の牛馬糞は多数見られたが，本種の個体数は次種とともに少なかった.

3. *Aphodius urostigma* Harold フチケマグソコガネ
2 exs., (May 3); 3 exs., (Aug. 3).

4. *Protaetia pryeri pryeri* (Janson) リュウキュウツヤハナムグリ
6♂♂4♀♀(Aug. 3); 1♂1♀(Aug. 4).
翅鞘に白斑を持つ個体が3個体含まれていたが，まばらで小さい.

コガネムシ相は2科4種と極めて貧弱で，固有のものはみられなかった．また，食葉性の種を欠き，琉球列島のほとんどの島に分布して害虫とされる *Anomala albopilosa* Hope アオドウガネを主とした *Anomala* 属もみられなかった．なお，近年沖縄本島に侵入し，近隣の島々に分散を遂げた *Protaetia orientalis* (Gory et Perchelon) シロテンハナムグリと *Oryctes rhinoceros* (Linné) タイワンカブトムシの侵入もみられなかった.

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